of Afghanistan there is far less emphasis on industry and more on the cultivation and export of fruit, vegetables, wood and nuts. Pakistan for example has for many years relied almost entirely on Aghanistan for onions, melons, nuts, grapes, apples and pears. During the past ten years Afghanistan has substantially increased exports to European countries of karakul sheep wool, dried fruits and nuts.

Afghanistan is rich in mineral wealth but, due again to the nature of the terrain and poor communications, the exploitation of this is often prohibitively expensive. Nevertheless the lapis lazuli mines of the north are worked and natural gas has been pumped to the Soviet Union since the 1960's. Afghanistan also has substantial deposits of salt, iron ore and uranium.

The growth of exports and hence the incentive for local farmers to devote a larger percentage of land to the cultivation of cash crops is difficult to estimate precisely. However production and price figures in so far as they exist for all major cash crop indicate that both vary considerably due to exigencies of the environment. Thus for example during the famine years of 1971 and 1972 following upon drought from 1970 onwards production figures were down by 20% (Etienne 1972) and wheat prices in the drought affected regions rose from an average of 42 Afghanis* per seer+ to 65 Afghanis per seer (Barfield 1981). In Afghanistan as a whole during that period the average wheat price rose from the 1970 of 40 Afghanis per seer to more than double - 88 afghanis/seer by the drought year of 1972. (see Fig.3). Mutton prices on the other hand remained level during the worst year of famine and only began to rise in 1973. This meagre data suggests a classic famine condition (Seaman & Holt 1980) whereby grain prices rise

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* 70 afghani = 1 US$

\+ 1 seer = 7.1 kilograms

Although these are regional variations the seer has been standardised in this report

due to shortages and hoarding and animal prices are depressed because of panic selling of herds in order to raise cash for grain and also to forestall losses due to death of animals from lack of grazing. The result is a drastic reduction in people's purchasing power and possible decimation of their herds.

(III) Political Events

It was within this somewhat fragile economy that the political events culmi ating in Soviet occupation of Afghanistan in December 1979, took place.

The overt expression of friendship between the USSR and Afghanistan goes back to the 1920's and certainly gained momentum in the form of Trade Agreements and Soviet Aid projects during the reign of King Zahir Shah and his Prime Minister, Prince Daud, between 1953 and 1963. For the next ten years economic, trade and aid agreements were signed. It was during this time, for example, that the Soviets built roads and the Salang Tunnel.

Economic hardship, debt, drought and famine preceded the overthrow of the King by Daud in 1973. Meanwhile student demonstrations in Kabul in the late 1960's accompanied the formation of the Peoples Democratic Party of Afghanistan (PDPA) which had grown out of an underground Communist group in 1965. The Party gained membership from the educated elite in Kabul in the next few years but also became bitterly divided between the two factions of Khalq and Parcham.

The winter of 1977 and 1978 was a harsh one and food

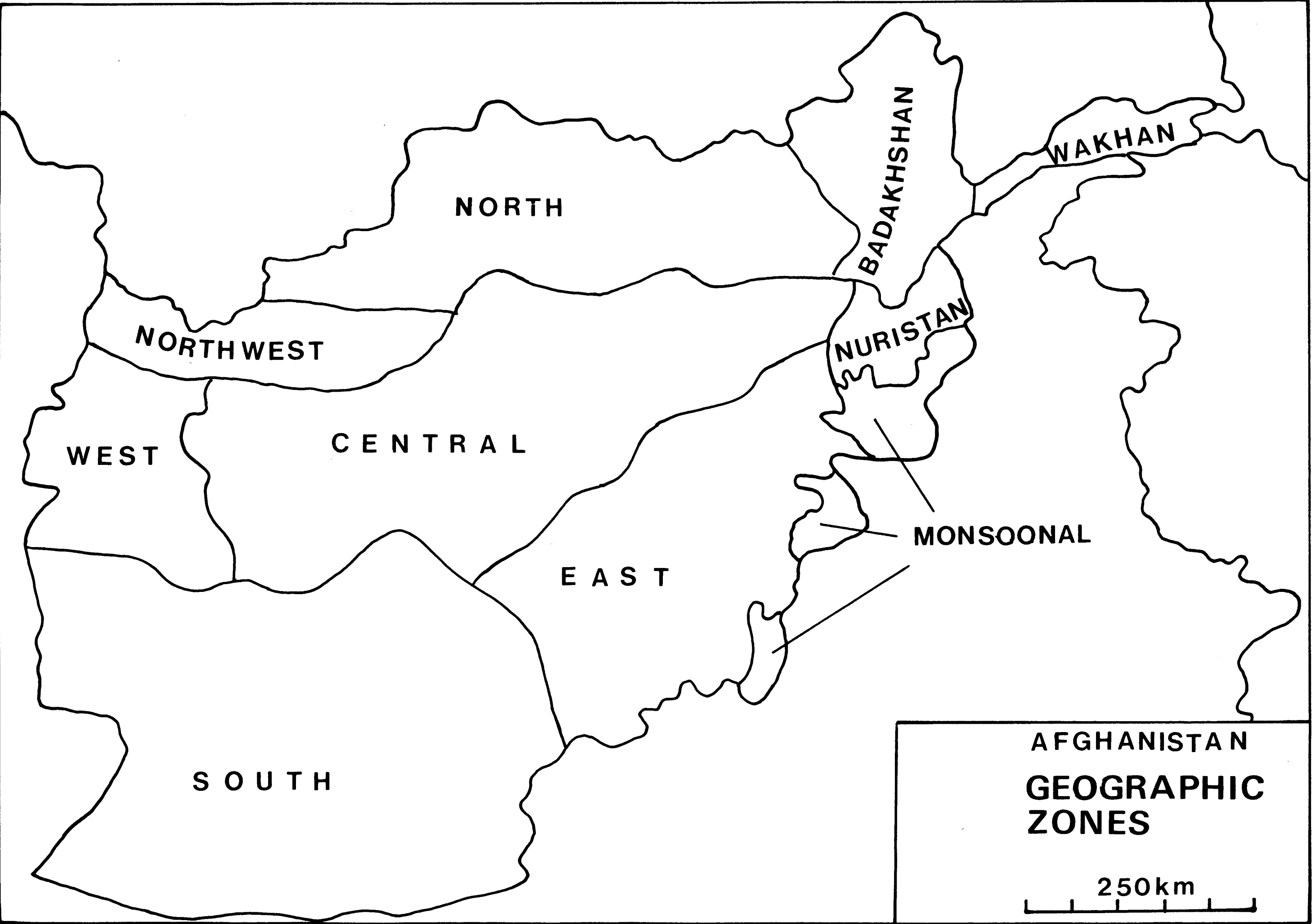


Fig 4. Geographical Zones of Afghanistan (Source: Dupree 1980)

shortages were evident throughout the country in 1978. Daud was overthrown and killed and there followed almost two years of increasing oppression, brutality and strife perpetrated first by Taraki and then by Amin. The Soviets who believed that the Afghan Communist Party was about to be most seriously exposed and embarrassed sent military forces accross the border on December 27th 1979.

Since that time various regions of Afghanistan have been heavily bombed, crops burnt, young boys and old men have been conscripted into the Afghan Army, and the Mujahidin resistance, at first a disparate and ill-organised struggle, has become more unified and forceful. The crucial need is to judge what effect these events could, and do, have on the economy in general and on certain regions in particular.

4. THE CONTEXT OF THE STUDY

In studies of recovery from natural disasters such as earthquake and/or cyclone, the hypothesis that disaster accentuates and accelerates those trends present in the community prior to the catastrophe has proved useful (D'Souza 1982 & 1984). If it can be applied in the present case then those areas of Afghanistan which were, before 1978, vulnerable to food shortages by reason of their remoteness and/or poverty would be likely to suffer more and become more immediately vulnerable to any shifts in the distribution of resources as the war progresses. Equally the hypothesis allows that in those areas which had a reasonably buoyant economy prior to 1978 would be unlikely to be so vulnerable. Therefore in analysing the data and interpreting the results, three factors have been borne in mind:

a - the geographical position of a given district or region including its proximity or distance to Pakistan, the avail-

ability of fertile land, the diverse opportunities for income generation, the strategic importance of the area and the amount of military action which has taken place in recent years.

b - the economic and ethnic status of a given area and its people.

c - the stated and actual reasons for leaving Afghanistan as expressed by newly arrived refugees and the extent to which links with their home villages have been maintained.

Three major factors influence food availability in different geographical zones of Afghanistan today. First availability and fertility of land depending to a degree on its altitude. (See Fig.4) Second proximity to sources of food and trade - (meaning predominantly Pakistan). Finally military intervention: (the Soviet presence and bombing attacks) In the early stages of this study it seemed likely that the provinces of the East, that border on Pakistan, although subject to repeated bombing attacks and mass exodus of the population as refugees to Pakistan, would nevertheless be protected from severe food shortages because of the opportunities for trade with Pakistan and countries to the East. It was thought that the shaky economic growth in recent years in Pakistan occasioned by large amounts of aid, foreign personnel, investments, building works, and labour opportunities, would benefit some of the trading centres in the eastern provinces of Afghanistan and because rapid transport of food and other goods was always a possibility in the event of a threatened local famine.

The South although lacking fertile land other than that bordering the river development systems is traditionally thinly populated and apart from the major city of Kandahar

and some other towns bordering the main road, military attacks have been relatively infrequent. To add to this though is the fact that the desert regions of Helmand, Nimruz and Farah do not offer farmers the security that mountains give and this has made them vulnerable to attack when cultivating their fields and collecting the harvests.

The West is difficult to gauge - but Herat is a fertile region and Iran has always provided the opportunity for temporary sanctuary and even economic activity. Unfortunately little economic information on this part of Afghanistan was collected.

Central Afghanistan is a traditionally poor area largely consisting of mountains and desert with relatively little flat land, insufficiently developed irrigation systems, very distant from the larger trading towns on the periphery of the region and the people, to some extent, are exploited by the annual migration of nomadic peoples who provide credit but at the same time demand such high interest rates that it is not uncommon for farmers to lose their farms in debt to the nomadic peoples (see Ferdinand 1972, Dupree 1975, Barfield 1981). However this region has seen relatively little militay action in the past three years and has suffered little agricultural destruction as compared to areas to the North and East. This region of Afghanistan together with certain areas of the north-west particularly Badghis and Ghor suffered severely both the loss of people and animals during the famine of 1971/72. The people remain vulnerable but so far due to a series of reasonably good harvests and the lack of bomb attacks they are not at present starving.

The North is the most productive region of Afghanistan with open well watered plains supplying most of the surplus

wheat production of the country and having good rice harvests, abundant cotton crops as well as of sugar beet and other minor crops. The large melons produced in certain regions such as the Qataghan valleys between Kunduz and Baghlan are famous throughout Afghanistan and even now constitute a major export (see Barfield 1981). Much of Afghanistan's mineral wealth is in the North as are many of the country's industrial initiatives such as sugar refining and cotton factories as well as fertilizer plants. The North has also been severely bombed as the Soviets have attempted to create a cordon sanitaire around the major and profitable towns that they hold in the north as well as to protect the major roads which lead from the USSR to Kabul. The hypothesis, taking these factors into account, however, suggests that the North as a whole is unlikely to suffer from widespread food shortages though this is not to deny that there may well be villages which due to repeated bombings have become vulnerable. But the majority because of an existing communications network built up in previous years to promote trading of surpluses and access to markets will have a greater chance of moving away from areas of destruction and destitution, perhaps to new districts in which there are either relatives or friends made during previous trading encounters.

This leaves the extreme <u>North-East</u> and for the purposes of this study the regions of the Wakhan Corridor, Badakhshan and Nuristan will be grouped together. The Wakhan Corridor is report to be effectively annexed by the Soviets and the erstwhile occupants, the Kirghiz, have, to a man, left. Badakhshan and Nuristan have similar environmental problems but different economic approaches, strategies and contacts with regions outside their enclosed and precipitous valleys. The Nuristanis have always been a self-contained people and although traditionally they have traded butter to both the west and the east of the Nuristani valleys they have also been more

self-sufficient than other communities in Afghanistan. There is no doubt that the present conflict in Afghanistan has exacerbated their poverty and their isolation. It is also true that some of them have crossed over their eastern border into the hills of neighbouring Pakistan particularly the Chitral region in order to receive sanctuary and refugee benefits. It is also reported that during the summer months some of the Nuristani men have returned to tend their farms, to plant and harvest their crops and to fight in the Jehad.

Badakhshan is a province of strategic importance by virtue of its proximity to the USSR and its position in relation to the Wakhan Corridor; it also has one of the most inhospitable environments in all Afghanistan. Badakhshan has more peaks over 20,000 feet than any other province (other than the high Pamirs of the Wakhan) and correspondingly fewer valleys available for cultivation. There are pockets of relatively flat land but the altitude of these especially in the more northern parts of the province is often too great for the successful cultivation of wheat. The people have always had a low standard of living and the increased isolation due to a strong Soviet military presence in this province has undoubtedly made it lower still. In normal times, for example, people of the Darwaz region of the extreme north bordering on the Soviet territories have relied for survival on bringing their animals, nuts and fruit to Faizabad the provincial capital: to Raghr a wheat growing area, or _in extremis_ to Rustaq in Takhar to sell stock in exchange for grain. This traffic has effectively ceased due to the expense of transport, the extremely long journey required to avoid Soviet military posts and the impossibility of hauling substantial amounts of grain over high mountain passes.

The valleys south of Faizabad are less isolated than those in the extreme north but are also even more heavily

TABLE I

SUMMARY OF PRICES PRE 1978/1981/1982/1983
(afghanis/seer* UNLESS OTHERWISE STATED)

	PREVIOUS TO 1978	1981	1982	1983
WHEAT	96	122	151	160
RICE	106	124	267	312
CORN	No data	60	109	112
BARLEY	No data	73	112	110
MEAT	45/kg	no data	125/kg	148/kg
POTATOES	14/kg	no data	140/kg	73/kg
TEA	140/kg	no data	380/kg	402/kg

* 70 afghanis (1983) = U.S.$1
1 seer = 7.1 kg
(standardised for all provinces)

patrolled due to the number and size of Soviet posts in and around Faizabad. This province together with certain regions of the far west such as Farah and the western and remoter districts of the central regions are certainly the most vulnerable to even small shifts in climate which could affect crops.

The differences between provinces in all the parameters either measured or gained through less formal methods are therefore dependent on geographical location, previous development history and current military strategies.

PART II

1. RESULTS

A. Agricultural and Economic Survey Results

The report on agriculture (Azam Gul 1983) gained through interviews with Afghan refugees in Pakistan demonstrated that the average crop yields of wheat, rice, corn and barley showed regular and substantial decreases in 1981 and 1982 using 1978 figures as a base line. The major cash crop, cotton, showed the greatest overall decrease in production, that is only 28.3% of 1978 capacity was produced in 1981 and was further decreased to 12.2% of the 1978 figures in 1982. Of the staples, rice production showed the least disruption but even so the 1982 production figures were only just over one quarter that of 1978. However, the report does not fully address the problem of other sources of income and/or food which could mitigate the scarcity of local produce. Furthermore the decrease in production to some extent matches the exodus of the population from Afghanistan. Survey data collected, in the course of the present study, from inside Afghanistan in the three provinces of Kunduz, Baghlan and Parwan showed a similar trend in decrease of production over a four-year period and a decrease in the labour availability to work on farms and finally in both the use of fertilizer and pesticides. The results also indicate that the buying and selling patterns are disrupted and all imports of foodstuffs between 1981 and 1982 are down by roughly the same average amount of seers as are the amount of surpluses sold on local markets or to neighbouring villages.

Table I shows the overall increase in food prices between 1978 and 1983. The sharp increases between 1981 and 1982 presumably reflect the shortages which followed that year's poor harvest which affected all prices. The

TABLE II

AVERAGE PRE + POST-HARVEST PRICES

(afghanis/seer)

1982	PRE-HARVEST	POST-HARVEST
WHEAT	157	145
RICE	333	201
CORN	133	85
BARLEY	137	87
1983		
WHEAT	184	137
RICE	341	284
CORN	115	110
BARLEY	113	107

TABLE III

AVERAGE PRICES OF ANIMALS AT THREE DIFFERENT PERIODS (afghanis)

	1978/79	1982	1983
OX	8,750	28,333	28,125
COW	No Data	13,000	18,071
SHEEP	No Data	2,687	3,881
GOAT	No Data	1,500	2,750

average prices in 1983 show less marked increases due to a relatively good harvest but possibly also to the fact that by this time food distribution in certain areas, notably those under the control of the resistance groups, has become more stabilised. The effect of an abundant harvest on prices is further emphasised in Table II which illustrates that wheat at least showed a reduction of 47 afghanis per seer in the average pre and post harvest prices as compared to 12 Afghanis in 1982.

The increase in animal prices between 1978 and 1982 (Table III) which in the case of oxen was catastrophic is important for two reasons. First of all oxen are chiefly used in ploughing fields - their value has obviously increased due to the scarcity of tractors as well as of spare parts and fuel. Secondly cows, sheep and goats which apart from food value are also kept as 'capital on the hoof' have not increased in price sufficiently (approximately 30% between 1982/83) to match original increases in oxen prices. (approximately 70%). The increase in prices of these animals may also indicate that husbandry is a risky investment under present circumstances in Afghanistan. Animals require summer pasturage and the travelling and manpower that this involves and winter feeding which even in former times was difficult for poorer families. The benefits of keeping animals to sell at the end of winter when food is short and animal prices relatively high is always carefully calculated against the cost of fattening them during the winter. Animals remain a vital source of food and a means of exchange but many have been killed in bomb attacks and by mines laid on traditional mountain tracks and farmers are perhaps less prepared to invest in animal stock than was the case previously. The long term effect of this change in the economy has yet to be established.

Another indication of a change in the traditional

THE THREAT OF FAMINE IN AFGHANISTAN

A Report on Current Economic and Nutritional Conditions

PART I

1. INTRODUCTION

In the Autumn and Winter of 1982/83 several informed journalists, relief agency personnel, and government representatives working in Pakistan and elsewhere expressed concern about the possibility of wide-spread food shortages and even famine in certain regions of Afghanistan. It was believed that the combination of, at that time, three years of fighting, mass emigration of farmers, relatively poor harvests and destruction of existing food stocks would result in severe food shortages by the Spring of 1983 and that the international relief community should therefore act to avert such a crisis.

Fortunately due to what can only be described as traditional ingenuity on the part of the Afghan rural population together with much internal trading of food over great distances between surplus and deficit areas and with the help of food imports from Pakistan no famine occurred though several areas undoubtedly suffered a very hard winter.

At the time of greatest concern (Spring 1983) it was suggested that it would be valuable to conduct a survey on agricultural production and nutritional status of children in Afghanistan in order to know more precisely if and where there was urgent need. An agricultural survey was carried out (Azam, Gul 1983) between the months of March and May 1983 and a survey of nutritional status of children under five was planned. The former study demonstrated that agricultural production was substantially reduced in those

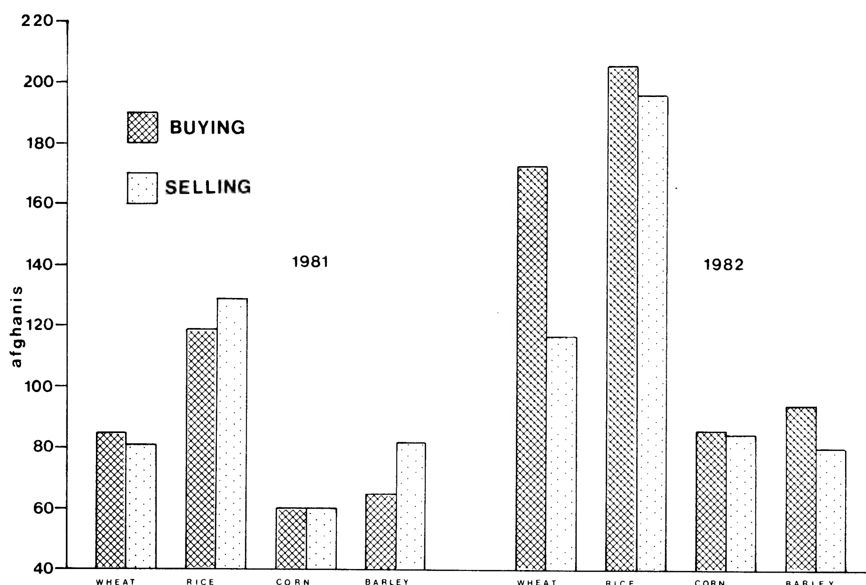


Fig 5. Histogram showing increases in buying and selling prices of food staples between 1981 and 1982

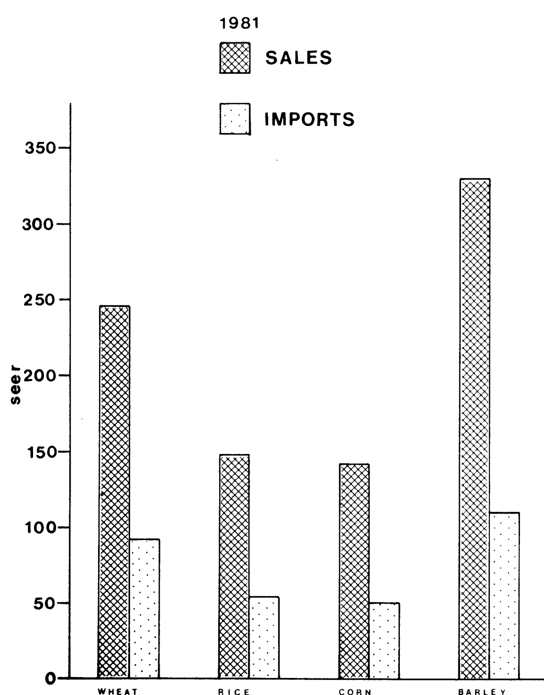


Fig 6. Histogram illustrating the average amount of grains sold and bought in 1981

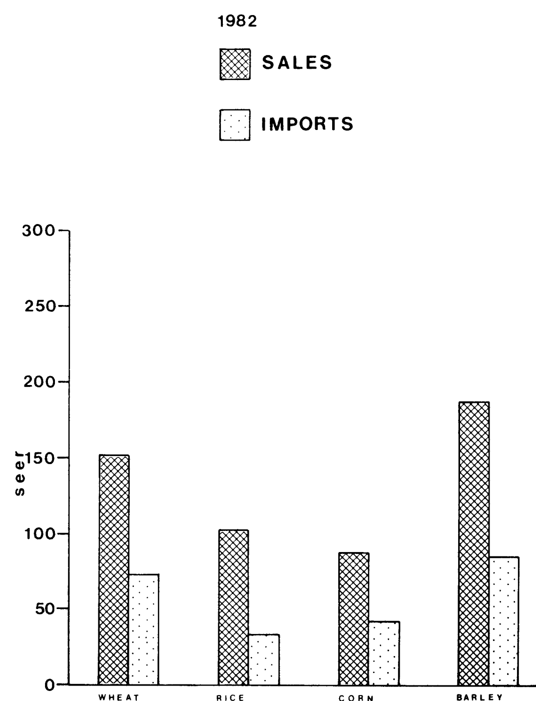


Fig 7. Histogram illustrating the average amount of grains sold and bought in 1982

TABLE IV

AVERAGE FARM SIZE ACCORDING TO PROVINCE (JERIBS*) + PERCENTAGE OF FARMERS REPORTING A CASH INCOME SOURCE

	FARM SIZE	CASH INCOME
BAGHLAN	23.0	40%
KUNDUZ	20.3 Jeribs	43%
PARWAN	5.6 Jeribs	55%

* 1 JERIB = 0.2 ha.

TABLE V

INCREASES IN PRICE OF WHEAT SEED

(afghanis/seer)

	1981	1982
PARWAN	72	175
BAGHLAN	76	85

TABLE VI

AVERAGE NUMBER OF SEER EXPORTED AND IMPORTED IN TWO PROVINCES*

	PARWAN		BAGHLAN	
	EXPORT	IMPORT	EXPORT	IMPORT
1981				
WHEAT	100 seer	52 seer	297.5 seer	none
RICE	none	33 seer	172.7 seer	58.6 seer
1982				
WHEAT	80 seer	95 seer	147.4 seer	none
RICE	none	37 seer	125.3 seer	40.1 seer

* This table summarises how much grain farmers bought and sold in 1981/82 in the two Provinces.

buying and selling patterns of local farmers is illustrated in Figure 5. This histogram suggests that in 1981 the discrepancy between buying and selling prices of the four staple crops of wheat, rice, corn and barley was minimal and that therefore profit margins though small were nevertheless present. The data from the agricultural survey for 1982 (Azam Gul 1983) however, shows that by 1982 profit margins had decreased substantially and in the case of wheat disappeared altogether. Therefore smaller farmers who in 1982 sold what surplus they had to the local bazaar or through other outlets suffered from the transaction because of the high prices they were forced to pay to buy in grain which most farmers are obliged to do at the end of the agricultural year.

If these trading prices are then compared with the average number of seers sold and bought during the same two year period (see Figs.6 and 7) the volume of sales of all grain recorded were consistently higher in 1981 than in 1982. Interestingly though a similar pattern of sales versus imports is maintained in the 1982 season in every case; for example farmers apparently normally purchased, in order of amounts, more barley and wheat than either rice or corn in both years.

More pertinent for the purposes of this report, however, are the differences between provinces in their overall patterns of trade. Of the three provinces sampled, two, Kunduz and Baghlan, showed a consistent pattern of greater wealth manifested in lower overall prices, greater surpluses, and more trading. These differences were confirmed in a later and different study carried out in the Autumn of 1983.

TABLE VII

FOOD PRICES AND RANGE (afghanis):

AUTUMN 1983 :

	WHEAT	RICE	CORN	BARLEY	POTATOES
NANGAHAR	(seer)	(seer)	(seer)	(seer)	(kg)
Price	144	274	112	105	76
Range	140-149	260-282	110-118	100-115	75-79
KABUL					
Price	145	324	118	108	61
Range	140-149	280-340	110-129	95-122	58-80
PARWAN					
Price	154	355	122	122	63
Range	150-160	340-375	120-125	115-130	60-67
BAGHLAN					
Price	119	194	95	91	54
Range	110-130	180-210	80-100	85-95	45-65
SAMANGAN					
Price	136	263	112	112	74
Range	130-156	255-285	100-124	96-146	70-82
BALKH					
Price	134	257	107	112	49
Range	115-150	140-290	90-120	100-124	40-58

TABLE VIII

PRICE VARIATIONS IN FOOD STAPLES :
AUTUMN 1983 (afghanis/seer)

	HIGHEST	LOWEST
WHEAT	160	110
RICE	372	180
CORN	125	80
BARLEY	146	85

TABLE IX

PRICE DISTRIBUTION ACCORDING
TO PROVINCE AUTUMN 1983
(WHEAT, RICE, CORN, BARLEY)
afghanis/seer

HIGH PRICES	LOW PRICES
PARWAN	BAGHLAN
KABUL	
NANGAHAR	

Table IV shows that the average farm size (in Jeribs*) differs between the three provinces and generally reflects the geographical position of each province and the availablity of flat cultivable land. The North it has already been suggested is a rich area compared with the rest of Afghanistan and this is reflected in the fact that the farms are larger and dependence on cash income from remittances of relatives working abroad or credit schemes is correspondingly less. Baghlan is agriculturally the richest province in Afghanistan. This wealth has undoubtedly assisted its inhabitants to avoid some of the economic difficulties evident in other provinces and of the latter perhaps the best example is Parwan which includes part of the beleaguered Panjshir Valley.

Table V shows that the price of wheat seed for Baghlan in 1982 rose by 10 afghanis as compared with a rise of 103 afghanis in Parwan province. Similarly the import/export or buying and selling figures for the same provinces (Table VI) show that in 1981 Baghlan exported almost three times as much wheat than did Parwan and in 1982 the figure though reduced is still nearly twice as high as wheat export from Parwan. These selling figures are set against the fact that no wheat was apparently imported during either year at least by the farmers interviewed whereas all the Parwan farmers imported an average amount of 52 and 95 seers of wheat for the years 1981 and 1982 respectively.

Price data collected in 1983 again show wide variation between provinces, Tables VII and VIII indicate the range found in the Autumn of 1983 while interviewing in six provinces (Nangahar, Kabul, Parwan, Baghlan, Samangan and Balkh). Table IX lists those provinces in which high prices tended to predominate and the single province in which

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* 1 Jerib = 0.2 ha

prices for all commodities were consistently lower, that is Baghlan.*

The visible variation in food prices from one province to another need not necessarily be evidence of a different vulnerability to acute food shortages - but simply an expression of deficit and surplus areas which occurs in a non-centralised economy as has always been the case in Afghanistan. However, results of this trade and price survey are interesting in that they show a quite different pattern from that which prevailed before 1979. For example, Parwan although not as rich as some of the northern provinces is nevertheless fertile and before 1979 carried on a good and lucrative trade with Kabul city selling its surpluses, fruit (especially grapes) and nuts, and importing, when and where necessary, wheat. Prices of staples in the various valleys of Parwan were never "high" since access to Kabul was direct, regular and quick. Prices therefore tended to reflect almost exactly the fluctuation which occurred in the central Kabul markets. Correspondingly the selling price of fruit and nuts was influenced by the nature of the harvest and consequent supply. Parwan had other sources of income, tourism for example, but was fundamentally a trading rather than a subsistence area.

Parwan, it would seem, is vulnerable because several areas within it have always been dependent on outside trade (as in Badakhshan) for economic survival and because that trade has been grossly disrupted by the war. For example the Shamali previously known as the granary of Kabul is now more or less agriculturally derelict due to the Soviet

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* Of the farmers interviewed in Parwan only 11% reported that they had had a surplus to trade in the 1983 season but the equivalent figure in Baghlan was over 47%.

control of strategic posts at Bagram and Charikar. The well watered plain is now virtually dry due to destruction of the complex irrigation systems. Panj hir itself has suffered more concentrated attacks than any other single area of Afghanistan and apart from agriculture the transport system has suffered as a consequence.

By contrast even though prices are high in Kabul city and there are undoubtedly shortages of supplies such as kerosene, wood and cloth the danger of acute food shortage is offset by at least two factors. First Kabul is traditionally a centre of trade, of imports and of commerce, and even though this has been disrupted, commerce continues. Together with this is, of course, the opportunity for employment, trading and purchasing. For example, the very large number of internal refugees who have sought safety from bombing by moving to Kabul City provide a large income for landlords. The sheer number of people in Kabul ensures that produce from outlying districts and villages will be bought into the city no matter what the risk. Additionally, the presence of a large number of well-paid government officials and Soviet advisers mean that there are consumers; traders have not been slow to service these consumers and there is brisk trading in food and other commodities.

Second the Soviets would probably act in the event of a threat of severe food shortages. The framework for food subsidy already exists. In an attempt to stabilise wheat prices the government releases fifty tonnes per day onto the market at a fixed price of 120 afghanis per seer. This procedure, since 1982, probably does little to effectively stabilise prices because much of it goes on to the black market immediately but nevertheless a system has been set up and could be used in the event of sudden shortages. It is clearly in the government's interest to see that Kabul does not starve; quite apart from the inevitable embarrass-

ment that this would give to the government and its consequences for the idealism of the Revolution, it would also affect the stability of an already fragile regime. Defection of government personnel to the Resistance or simply leaving government service is something the Soviets wish to avoid and one mechanism has always been to offer high salaries to government officials so that they may keep themselves and their families well fed.

B. Nutritional Survey Results

(i) Previous Health & Nutrition Surveys

Before Considering the results of the Anthropometric Survey carried out in Afghanistan in 1983, it is essential to have some notion of conditions before 1979 in order to assess what kind of impact the changes in agricultural production might have had.

No country wide surveys have even been completed however the two limited nutritional surveys (one published and the other as yet, unpublished) which are available suggest an extremely high rate of severe nutritional problems in the population at the best of times. What then does health mean in Afghanistan?

Management Sciences for Health (O'Connor 1980) carried out a survey in the 1970's and reports that 60% of all infant and childhood deaths were due to respiratory illness, diarrhoea/dysentery, and what local people call 'Jinns' or death resulting from convulsions. Malnutrition they believed was underreported because it was not perceived as a distinct illness by villagers, ".... but rather an end condition resulting from other health problems" (page 178). They go on to remark that the prevalence of malnutrition is very high. Ample evidence of high childhood morbidity and mortality existed before their

TABLE X

WEIGHT FOR HEIGHT DATA

(DISTRIBUTION OF WEIGHT FOR HEIGHT CATEGORIES IN CHILDREN LESS THAN 110 CMS)

PROVINCE	TOTAL NO: MEASURED	FRACTION WITHIN NORMAL RANGE	<-2 STANDARD DEVIATIONS BELOW NORMAL	>-3 STANDARD DEVIATIONS BELOW NORMAL
KABUL	1269	93.6%	5.6%	0.8%
BALKH	1724	89.0%	6.4%	4.6%
FARYAB	749	83.8%	11.5%	4.7%
BADAKSHAN	1181	61.2%	18.2%	20.6%
FARAH	78	62.8%	19.2%	18.0%

TABLE XI

ARM CIRCUMFERENCE DATA

(DISTRIBUTION OF ARM CIRCUMFERENCE MEASUREMENTS IN CHILDREN AGED 1 - 5 YEARS)*

PROVINCE	TOTAL NO: Measured	GREEN >13.5cm	YELLOW >12.5-13.5cm	RED >12.5cm
KABUL	1304	42.0%	38.4%	20.0%
BALKH	1732	46.0%	32.6%	19.5%
FARYAB	791	50.2%	37.0%	11.4%
BADAKSHAN	1220	39.0%	33.0%	28.0%
FARAH	79	10.0%	29.0%	62.0%

* Green indicates 'normal'
Yellow indicates 'at risk'
Red indicates 'malnourished'

survey, and one of the most important findings was that under-nutrition was extensive among younger children. For example their survey of arm circumference measurements of 358 children between the ages of one and five show that amongst the one to three year old age group less than 10% were classifiable as well-nourished and of the older group, that is those between four and five years of age, less than 60% were judged to be well-nourished. Furthermore the highest infant mortality is reported for infants between nought and one years and therefore both the Management Sciences for Health (MSH) survey and the present survey results are measuring to some extent the survivors of a given population. The MSH survey shows a clear relationship between illness and poor nutritional status. Thus, of those who reported that their children had been sick in the past two weeks only 16.7% fell into the well-nourished category and 44.7% into the malnourished category (page 186).

A second, and as yet unpublished study carried out by Ken Grant for Save the Children Fund (UK) in 1978 in the Shewaki area of Kabul indicated that the levels of malnutrition in the villages of the area were as follows. Of the 1,700 children included in the survey 1,518 (89.2%) could be considered normal; 148 (9.7%) fell into the minus two Standard Deviations below the mean category and 34 (2.0%) were suffering from frank malnutrition as measured by weight-for-height. The equivalent figure in the present study for the same village are as follows. Total = 112. 103 (92%) normal; 9 (8%) >-2 Standard Deviations and none in the severe malnutrition category.

A third unpublished survey of malnutrition and its possible causes comes from a comprehensive health study funded by two relief agencies at present working with Afghan refugees in Pakistan. Apparently even under conditions where access to food is reasonably regular and subject to none of the vicissitudes of life at present in

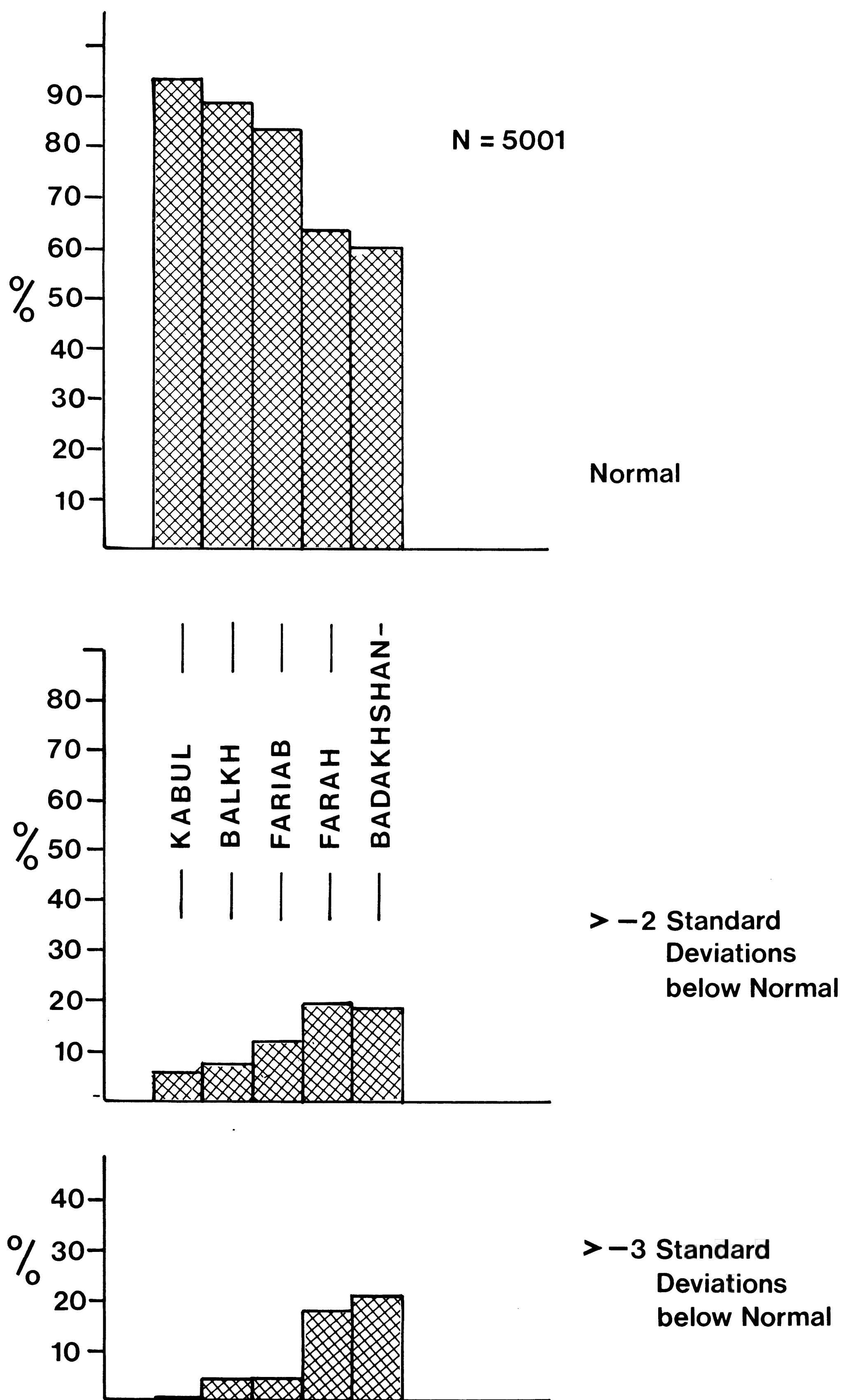


Fig 8. Histogram illustrating the distribution of weight-for-height results in children aged 1-5 years

Afghanistan 20% of the large and random sample of children showed some degree of malnutrition. In arm circumference measurements of this same sample 12% showed less than 12.5 cms and 16% were at risk, that is in the yellow category. If the three measurements of weight-for-height, weight-for-age and arm-circumference were combined they found 13% incidence of malnutrition in the under five population. These results coincide with anecdotal reports from medical teams which have worked inside Afghanistan and where members report high (up to 60%) infant mortality, that is between birth and 18 months of age and that the time of weaning is extremely vulnerable due to mothers' ignorance of hygiene and what constitutes adequate nutrition.

It is not known exactly what causes such severe malnutrition but the evidence available does suggest that a combination of poor hygiene, sanitation and feeding practices, a lack of clean water, inadequate housing and endemic disease all combine to make children extremely vulnerable. If even a small shift in the external environment occurs its bound to have profound repercussions on local populations.

(II) Present Nutrition Survey Results

The results of the nutrition survey show, as do other survey results, great variation between provinces, between districts within provinces and even, in some cases, between villages. (see Appendices I and II for full details of nutritional survey areas) Table X shows the proportion of well and malnourished children in each of the provinces, as defined by weight-for-height. Table XI summarises the provincial distribution of nutritional status according to arm circumference measurements. Both methods clearly illustrate the extremely poor results for the province of Badakhshan and, to a certain extent, for the provinces of Faryab and Farah. The other two provinces Balkh and Kabul

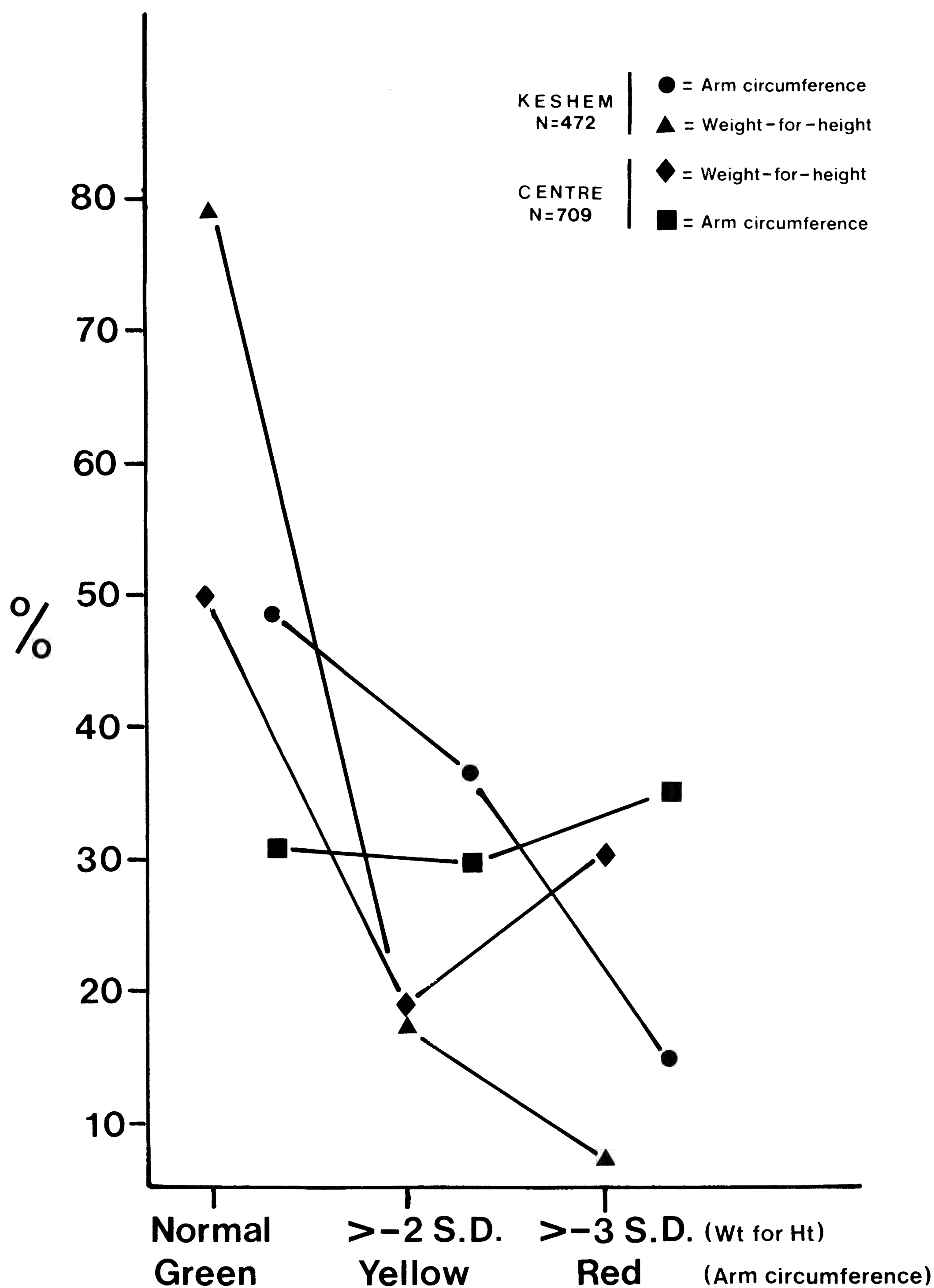


Fig 9. Distribution of weight-for-height and arm circumference measurement results in two districts of Badakhshan

although showing an uncomfortably high incidence of malnutrition as shown by arm circumference measurements nevertheless appear to be normal within the context of an under-developed country. The discrepancies between the two sets of results require some discussion but are partly resolved by the breakdown of results according to district rather than province. (see Appendix II)

The unacceptable rate of severe malnutrition in Badakhshan where over 20% of children are more than minus three standard deviations below normal; (and of this group 10% fall into the greater than minus four standard deviations below normal category.) (see Fig.8) These figures suggest conditions as severe as those found in times of famine. The conventional wisdom on acceptable figures from a developing and even very poor country or in refugee populations, acknowledging that nutritional status will be very different from that of children in developed countries, is as follows:

> "In a well nourished population between 2 and 2.5% of the children under five years of age will have weight-for-height values below minus two standard deviations. In a less developed nation without a nutritional emergency, 5% or more of the under five year old children may be at this level. As a rule of thumb, rates of under-nutrition greater than 8% (as measured by percent of children less than minus two standard deviations weight-for-height) are cause for concern. Rates greater than 10% have been seen in extreme crises such as in Biafra in 1969, in the Sahel during the mid-1970's and in Zaire in 1978. .... The percentage of children whose weight-for-height values are less than minus three standard deviations is usually very small. <u>If this</u>

<u>rate is above even 1%, there is cause for concern."</u> (Graitcer 1981). (My emphasis)

The results presented in this Study depart radically from these standards.

In all provinces where children were weighed and measured except Kabul, between 4% and 20% of children showed severe malnutrition. These results compared with Graitcer's 1% figure which is 'cause for concern' are very worrying.

Of the two districts sampled in Badakhshan one, Keshem, is far less severely affected than Faizabad the provincial centre. (see Appendix II) Keshem shows if not acceptable, at least a nearer to normal distribution in that nearly 80% of the children measured fall in the normal ranges according to weight-for-height. And of the 23 villages in the Survey (total 168 children) only 22 children fall within the category of severe malnutrition that is only 22 or 13% of the children fall within the category of severe malnutrition. (see Fig.9)

Faizabad on the other hand shows that under 50% of the sample fall within the normal range and a total of 221 children or over 35% of the sample fall between more than minus two and minus four standard deviations below the mean and of these over 15% are between more than minus three and minus four standard deviations. The arm circumference data in more detail (see Appendix II) indicates the same magnitude of differences between the two districts as far as severe malnutrition is concerned, the centre or Faizabad area having twice as many children - over 35% as compared to 15.5% in Keshem - in the red or less than 12.5 cms arm

circumference category. Only four out of the 44 villages sampled showed anything approaching normality in that 76 out of the 102 children measured could be considered well-nourished. Of the remaining 40 villages representing 633 children all had less than 70% well-nourished children and 8 of these villages show that less than 38% of the children in each village could be considered as well or even adequately nourished. If these results are then compared with Kabul where an equivalent number of children were measured by the same teams there are significant differences.

In Kabul province all districts which were sampled showed that over 90% of the total number of children measured fall within the range of normality according to weight-for-height and that those who show more than minus two standard deviations below mean are, in each of the districts, less than 6% of the sample. In the Bagrami district of Kabul 90% of the children in 22 of the villages sampled were apparently adequately nourished and in the remaining 4 villages up to 80% of the children were well nourished. The arm circumference data for Kabul however, show a rather different picture and none of the concordance between the two sets of data evident in Badakhshan. This certainly means further investigation in due course but it is considered that the arm circumference kind of measurement, particularly since the method chosen in this Survey was the colour coding system rather than actual measurement of the child's arm in centimetres, is apparently a less sensitive method and many nutritionists would prefer to rely more heavily on the weight-for-height data.

The figures for the province of Balkh are more consistent than is the case for other provinces meaning that there is less difference between the districts and there is, too, a greater matching of the weight-for-height

provinces sampled but was not able to pinpoint areas of acute food shortage. The results of the latter survey completed in September 1983 have not been previously analysed or published and are incorporated in this report. In spite of these initiatives it was believed that there was still room for an independent survey of the state of affairs prevailing in the Autumn of 1983 which it was hoped would help to clarify earlier concerns and also to provide a basis for future assistance plans. This report results from surveys and interviews carried out in Afghanistan and Pakistan between October and December 1983.

The objective of the study were to carry out a systematic survey of food availability in Afghanistan and to consider if famine was a likely or potential consequence of the war and if so which regions were more likely to be vulnerable. This necessarily entailed an assessment of current agricultural and other economic practices. The secondary aim was to examine as far as possible the link between food shortage in Afghanistan and mass exodus of refugees into Pakistan. On the basis of the above information it was hoped to clarify what kind of relief assistance might be of the most immediate value inside Afghanistan. Finally, this report represents an attempt to both collect and analyse baseline data which may provide a framework within which future information can be fitted and interpreted.

2. METHODS

The intention was to spend a third of the study period building a working hypothesis about food availability in the different geographical regions of Afghanistan (fig.1) and then to collect more detailed information if at all possible from those areas which were judged to be more at risk than others. Three main categories of information were used and can be summarised as follows:-

and arm circumference results. The figures themselves again show a degree of malnutrition which is not unusual in Afghanistan and although associated with very high infant mortality rates but not dramatically different from the results of surveys and observations carried out in Afghanistan prior to 1978.

The Anthropometric data go on to indicate that the province of Faryab shows more vulnerability than either Kabul or Balkh in that there is a higher percentage of children at risk as judged by those falling into the category of more than minus two standard deviations below the mean and a greater number of children in the yellow or less than 13.5 cms arm circumference category. Two factors militate against the incorporation of the Farah province results. The sample is first of all small and taken from only three villages in one district. The very poor results therefore could (although unlikely) be due to the immediate after effect of infectious disease such as measles which can affect the nutritional status of children rapidly and severely. Secondly there is little ancillary data from other survey and interview data to support or refute the anthropometric results which, however, indicate less than sanguine conditions.

C. Discussion of Survey Results

The results and their significance are now considered with reference to first of all the difficulties created by the environment and secondly by the military presence and intervention.

(1) The Environment The difference between in the results suggest that previous socio-economic conditions and geographical location may affect the present viability of communities.

Of the provinces and districts sampled Badakhshan has the greatest number of high mountain peaks and the least amount of cultivable land. For example well over a quarter of the land in Badakhshan has mountains over 2,000 feet and approximately 36% of the land has mountains between and 6 and 10,000 feet. People and agriculture are funnelled into the narrow valleys between the steep mountain slopes. There is very little hard information on either the nutritional status of children or on economic conditions prior to 1978 however the geographical location alone guarantees a degree of vulnerability for the indigenous communities because of the isolation imposed by mountains.

Geographically there are two regions approximately one hundred kilometres or eighty miles apart by road: Keshem is at greater altitude, its villages more remote and therefore more vulnerable and dependent on access to trade either with nomadic peoples or at bazaars in larger and more distant towns. Faizabad the centre region, on the other hand, due to its relative ease of access has suffered less isolation than other districts and until recently has had a thriving market partly known for its salt trade. Faizabad, however, has more recently been in competition with Rustaq due to the fact that the latter is nearer to the more western trading centres and Faizabad can be considered by some as being at the " end of the line". The following quote neatly summarises the state of the bazaar economy in the centre region of Badakhshan prior to 1978. ".... the Faizabad bazaar betrays its subsistence orientation and a lack of articulation with the rest of the Afghan economy - the market caters only to the needs of people who have very little cash to spend. A survey of business conditions in Afghanistan revealed that the only place which 'appeared less prosperous than reported in the past and whose inhabitants indicated that business conditions had

deteriorated' was Faizabad." (Fry 1974 page 48, quoted in Barfield 1981, page 109)

(II) Military Intervention If the recent military intervention which has been especially directed at the centre region of Badakhshan is then superimposed upon the pattern of geography and the nutritional survey results the marked differences between the provinces and also between the two districts in Badakhshan become more understandable.

A brief glance at the map shows that northern Badakhshan in general and Faizabad as provincial town and communications centre block a free Soviet passage to the Wakhan Corridor which, as has already been mentioned, is said to be wholly annexed by the Soviets and in which there are now several thousand Soviet troops together with their installations. Clearly it would be to the economic and military advantage of the Soviets if access to the Wakhan Corridor could be achieved via Faizabad which itself has a large Soviet presence.

Badakhshan as a whole for these reasons has been subject to frequent and destructive bombing attacks. These have been directed towards making the road between the Soviet border at Imam Sahib and the major Soviet military bases at Kunduz and Faizabad centre safer for their troop and food convoys and have therefore involved bombing and bulldozing of villages either side of the road and even some distance into the hinterland in order to rout Mujahidin strongholds.

The triangle formed by Faizabad, Jurm and Barak where the nutritional surveys were largely carried out has seen some of the worst fighting since 1979 due to a repeated pattern of Mujahidin attacks on military posts to capture arms, bridges and other strategic positions, and to ambush convoys which have resulted in reprisal bombings where

whole villages have been destroyed together with crops, irrigation systems and animals. For example the area immediately south and south-west of Faizabad is a large open plain but has been undercultivated in recent years due to the fact that it is constantly patrolled by Soviet helicopter gunships. In addition the road between Faizabad and Barak has been cut by the resistance almost continuously in the last two years (AIC Bulletin, January 1983).

The immediate effect on peoples of the region can be summarised as follows. Many rural communities from the areas surveyed are too poor to travel to Pakistan a journey which can take up to 40 days and cost several thousand afghanis but have moved away from Faizabad Centre and some say the population of the city has been reduced in the past three to four years by 7,000 people.

This dislocated population now living in the more rural villages surrounding Faizabad and used to trading in one of the least cash oriented economies in the whole of Afghanistan before 1978 has now been forced to buy grain rather than barter or exchange it for the following reasons. First of all, traditional journeys to trading areas such as Raghr, Rustaq and Taloqan are now dangerous and require devious routes over high mountain passes. The high cost of such risky ventures and the sheer difficulty of transporting grain has forced prices to levels quite outside the reach of ordinary people. For example it is estimated that it now takes between 30 and 40 days for the inhabitants of Darwaz to bring grain from Raghr back to their home villages by donkey. Secondly the nomadic peoples who previously travelled regularly into the remoter districts of Badakshan played a vital role in sustaining the fragile economy by bringing grain to the area in exchange for local products and animals. The nomads no longer travel into the interior of Badakhshan and this has

had an immediate effect on the food, cash and exchange economy.

Prices in Faizabad Centre have responded rapidly to all these stresses and are apparently maintaining a very high level because the Soviets can afford to pay them. It has been said that wheat, which before 1979 was approximately 70 afghanis per seer is now on the market at 375 afghanis per seer if, indeed, it can be found. While it is the case that the nutritional survey was carried out at the end of what was a poor harvest season, to counteract this it is fair to say that the most vulnerable communities of Badakhshan, that is north of Faizabad, were not surveyed at all and using the same rationale as set out above it is likely that these communities are suffering even greater hardship than those who congregate around Faizabad. It is not known how many people might be affected, a conservative estimate suggests that the pre-war population may have been just under 300,000* people and allowing for perhaps 10,000 who have left that still leaves a substantial population at very great risk.

The available results from Badakhshan conform well with the original working hypothesis of this study that the poorer communities disadvantaged for whatever reason would suffer a disproportionate amount of hardship in the event of a disaster. The situation in Badakhshan is clearly greatly exacerbated by the strong Soviet military presence and the number of military attacks.

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* During Daoud's time it was reported that there were 48,000 card carrying men of Northern Badakhshan and this multiplied by the average family size of 6.5 gives a former total of 312,000.

This picture can then be compared with Kabul where the weight-for-height data, at least, showed a reasonable state of nutritional affairs. However the arm circumference survey results were less reassuring and indicated that high proportions of the child population in Kabul if not starving were at least at considerable risk. Kabul also has a strong military presence and the areas sampled, Saroobi, Bagrami and Musahi to the west and south-west of Kabul are all on major Mujahid routes to the north-east, north and centre of Afghanistan as well as being major centres of the resistance. They therefore attract a great deal of attention from the Soviet helicopter gunships. It is not possible to construct exactly for each village in the survey the recent bombing, agricultural and military history but the point to be made is that these communities are no less harassed and may have to put up with the extra burden of feeding large numbers of Mujahidin on their way to do battle in the North.

However there is no doubt either that these areas are on the main trading routes between Pakistan and Kabul and their peoples have to a very significant extent economic links with Pakistan which have been used and intensified since 1979. In addition very large numbers of people from these Eastern provinces have left their farmlands either in the hands of relatives, neighbours or tenants to become themselves refugees in Pakistan while at the same time maintaining close links with their sources of income. All these factors presumably contribute to rendering people in the Eastern provinces less vulnerable to food restrictions and food shortages than is the case in the more Northern and certainly more remote communities of Afghanistan.*

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* This suggestion of course begs the question as to what kind of people became refugees in Pakistan when the Soviets occupied their country. A full survey has yet to be carried outbut preliminary observations would suggest that the first wave of refugees in early 1980 may have been

(Footnote continued)

TABLE XII

INDICATORS OF VULNERABILITY AT DISTRICT LEVEL (AUTUMN 1983)

	% Mal-* nourished children	Food Prices W.	R.	C.	B.	Area under control of Government or Mujahid forces	Surplus produce#	Internal+ refugees
KABUL								
Bagrami	6.6	140	320	119	100	Government predominantly	None	100%
BALKH								
Balkh	6.9	123	223	94	114	Mujahid	100%	None
Narrishahi	12.1	138	272	97	108	44%Mujahid	65%	9%
Centre	19.4	149	289	123	119	Government	None	100%
PARWAN								
Bagram	No data	152	342	121	118	Government	None	None
BAGHLAN								
Nahrin	No data	110	190	95	90	No data	100%	None
Centre	No data	122	192	102	92	Government	100%	None
Anderab	No data	130	200	80	85	Mujahid	None	100%

Notes:
* Those children which fell into the >-2S.D. below normal category were included
+ These figures represent the % of villages in the sample which report internal refugees
These figures represent the number of farmers in the sample who reported surplus production of food

W = Wheat R = Rice C = Corn B = Barley

(IV) Predicting Vulnerability

So far this report has attempted to bring together the results of survey data as well as information gained from a range of other sources. The concentration has been on nutrition, agricultural production and price information and, before leaving this more numerical aspect of the results in order to discuss the wider application of the information gained, it is tempting to suggest a mechanism whereby vulnerability can be predicted.

The tendency among any academic group in the field of rural economics, nutritional assessment and similar development areas is to emphasise the need for village studies, for constant verification of hypotheses and for limited conclusion drawing. All this is as it should be since science progresses slowly and with rigour. On the other hand, those organisations whether they be relief agencies or governments need to have answers rapidly in order that their actions be informed. The search therefore is always for indicators of impending crisis whatever they might be. It is also clear that should such indicators be found and indeed found to be accurate, there is always the possibility that action can take place in advance of a threatened event and possibly therefore avert the catastrophe.

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represented by three categories: first of all the wealthier landlords, who had sufficient resources to move themselves and their immediate family to Pakistan and yet maintain access to resources in Afghanistan. Secondly those who released only some members of their families to take up the benefits afforded refugees in the newly-set-up camps in Pakistan and thirdly, the very poor who immediately perceived the potential advantage of a regular food supply and possible job opportunities in Pakistan. Needless to say all of these categories were clearly threatened by the war but nevertheless a great many stayed behind and the question is why and which people. This clearly has significance when considering the nutritional status of a population simply because it is important to know whether one is measuring the upper or lower economic echelons of the society.

This dilemma was constantly in mind during the course of this study. It has always been said that Afghanistan as a country does not lend itself to generalisations and recent events have made it even more inaccessible than usual not only physically but also in terms of the accuracy of the information which flows out of it. In the present study strenuous efforts have been made to seek causal associations between the different sets of data gained during the past year and their relationship to the different geographical areas which were sampled. Table XII illustrates different parameters for those provinces and districts in which more than one survey took place.

The tentative conclusions which might be drawn at this stage are as follows: There is an association between poor nutritional status as measured by weight-for-height data and rising prices of wheat. There are also associations between increasing food prices and (A) the lack of surplus produce - suggesting a reduction in income and therefore in purchasing power and (B) government controlled areas in which there may be sufficient employees of the government in addition to Soviet technicians and military personnel who are paid salaries large enough to buy at high prices and therefore contribute to their maintenance and (C) the presence of internal refugees or displaced persons. This latter factor of course could be a quite arbitrary association and due rather more to the fact that internal refugees may move to government controlled areas because of their relative safety but which have high prices due to the government presence: this we know to be the case in Kabul City.

In order, however, to test this a little further, the two seemingly clearly associated sets of data namely nutritional status and prices have been compared at village level (see Table XIII). There is an even clearer association here: decreasing standards of nutritional

status move in line with price increases in food staples. The price of wheat seems to be centrally involved. Finally Table XIV looks at whether or not a case can be made for city and large urban centres being more vulnerable in terms of nutritional status of children than rural areas. This Table should be compared with Appendix II which shows the complete breakdown of nutritional status measurements according to district. It would seem that in some cases urban centres are more prone both to decreasing nutritional status in children and higher prices of food staples, mainly wheat.

There are not, perhaps at this stage, sufficient data to draw firm conclusions; however there are sufficient to suggest that there is every value in continuing to systematically collect relatively simple numerical data such as price distribution of foodstuffs and whether or not surplus produce is up or down on the previous season. In addition, it should now be more justifiable to set up a rapid survey of nutritional status in those areas which, according to the conclusions in this report, are clearly vulnerable.

In conclusion to this section one has to ask whether the severe malnutrition recorded in certain provinces and districts is due to food shortage which in turn is due to rising prices and lowered production. This is most difficult to answer. Travellers in Afghanistan, eye-witness accounts, and photographs all suggest that food is available and even in remote districts except perhaps part of Badakhshan, the food distribution network is undoubtedly functioning. But prices may simply have reached a point where poorer people cannot buy. This may first of all be a recurrent pattern but increasingly it is due to the disruption of people's normal small scale economic transactions. This again is a classic picture of pre-famine vulnerability. As has been said before famine is rarely due to absolute shortage of food but more often

to the price of food rising rapidly such that the majority of the people are unable to buy what is availabe. This is a situation which could very rapidly prevail in Afghanistan.

(1) Survey Data

(See Appendices I - III for details of methods and areas sampled)

A. Agricultural Survey - March-May 1983. The Agricultural Survey project directed by Dr. Azam Gul was in two parts, the first consisted of interviews with Afghan farmers who were at the time refugees in Pakistan and the second of interviews carried out in Afghanistan. Only the latter results have been used in this report. The results include information on agricultural production, farm size, labour availability, and income sources for the years 1978, 1981 and 1982 in three Provinces.

B. Nutrition Survey. This survey was carried out by a six-man team previously trained by a nutritionist from a relief agency working with refugees in Pakistan. The teams measured weight, height, age and arm circumference of over 5,000 children between the ages of 1-5 years in five Provinces between July and October 1983.

Weight-for-height is the recommended body measurement in times of emergency since it is both a sensitive indicator of acute malnutrition as well as being independent of sex, ethnic group and age. The concept relies upon the fact that children up to about the age of ten years maintain a reasonably constant relationship between body mass (tissue) and height. In periods of either food shortage or illness severe undernutrition results in loss of muscle and fat which are used up to provide energy and the child gets thinner but does not lose height.

PART III

OVERALL DISCUSSION AND CONCLUSIONS

The results presented in this report, when combined, shown an alarming picture of reduced agriculture production, high prices of food staples and poor nutritonal status of children. In particular, there is an association between the poorer and geographically remote communities, disruption of traditional trading patterns due to military activity, high food prices and severe malnutrition in children. What do these results indicate for the immediate future and what attemps are there to stave off economic collapse and consequent mass exodus or famine? How far, for example, are poor nutritional results a direct consequence of the food shortages and do high food prices necessarily imply that widespread famine will occur.

Previous work on pre-famine conditions (Seaman and Holt 1980; Holt and Cutler 1984; Cutler 1984;) has been concerned with analysing the inter-relationships between disruption in agricultural production for whatever reason, prices of food grains and livestock and the attempts by victims to earn cash by selling animals or migrating to find employment. Studies of famine in Ethiopia, Bangladesh and the Sahelian regions of West Africa suggest a common sequence of events which give warning of a future crisis. Food becomes scarce due to perhaps local failure of rains, prices of grain and especially of transport rise forcing people to sell animals to raise cash in order to buy food. If these measures don't work, families may then have to sell more important assets such as milk cows or oxen or migrate to distant places to get work. The phenomenon of famine may appear with frightening suddenness as the market prices paid for animals and wages drop due to the influx of both animals and labour.

The role of the market in famine and food distribution is crucial in those small-scale economies which are to some extent dependent on market rather than subsistence transactions. Social or governmental institutions capable of meeting shortfalls in production and also of redistributing food in a population are a vital aspect of famine prevention.

However, the relationships between scarcity of food in a given area and starvation are very variable. For example, while poverty is a usual precondition of famine, famine is not always a regular consequence of poverty and furthermore, famine is quite distinct from even the extremes of poverty. High market prices can simply indicate that there is little open trade and low prices need not necessarily be reassuring if people have insufficient money to buy food.

For these reasons the results presented in this report and their implications must be treated with caution. The aim was to look at several different kinds of data gathered in the pre- and post-harvest seasons and to determine whether or not there was any evidence for a significant <u>change</u> in production and price patterns. Even if this could be demonstrated, other factors which might mitigate the consequences of local food shortages, such as additional sources of income, have to be considered. The assumption that a guerrilla war, repeated bombing attacks and reduced agricultural production necessarily create famines is not always valid.

The extent to which rural communities in Afghanistan as a whole have been and are dependent on purchasing food from markets is difficult to estimate. However it is clear that in the regions sampled all communities, have for a considerable period of years, been involved in, sometimes, complex economic transactions in order to buy in essential

supplies which are not locally produced, notably wheat and tea but also sugar, rice, fuel, cloth and salt. That the economy in general is market dependent and also extremely sensitive to intervention is illustrated by the following example. During the summer of 1983 a salt mine between Andkhoy and Daulatabad in the North was seized by the regime and instantly salt prices in the surrounding rural areas doubled, long before there was any actual shortage. (Personal communication Olivier Roy) accounts of the drought induced famine of the early 1970's indicate that the cause was not so much an absolute shortage of grain but exponential rises in transport costs which prevented wheat exports to the remoter hard hit provinces. (Fry 1974). At that time, Afghans report, people were forced to sell children in order to raise money for food. The price of transport in Afghanistan today is very high; for example the cost of transporting 100 tonnes of wheat in the Hazarajat region is the same as the purchase price. Afghan interviewees repeatedly cited the cost of transport as a major item of expenditure and one which they feared they would not be able to meet in the future.

This would suggest that unless there are alternative sources of income which have increased to keep pace with price rises in food staples or food is being exchanged and distributed independently of the market system there is no doubt that large sections of the Afghan community in the liberated areas and even in the urban centres will gradually be unable to purchase enough food as their cash resources are depleted.

Apart from cash received from the sale of surplus produce, most rural Afghan families could, in the past, expect to receive additional income from a wide variety of sources varying in importance according to the family

situation. These included, cash remittances from relatives abroad or from those with jobs in urban centres, wage or casual seasonal labour, participation in sales of cash crops, karakul sheep, leather, wood handicrafts and horticultural products as well as of drugs. The majority of these sources have if not disappeared altogether certainly become limited due to the disruption of trading networks, lack of manpower and high transport costs. Remittances from the Gulf States especially Iran and from Pakistan and elsewhere continue but there are, today, additional difficulties such as inflation which reduces the value of foreign cash and the lack of jobs. To counteract this there are other opportunities for individuals to either earn money or otherwise profit from the war situation in Afghanistan. Most of these opportunities involve either overt or covert collaboration with the government which, with an increasingly unified resistance, constitutes a considerable risk, or by trading in an entrepreneurial sense. The latter option whether it be exporting opium or other drugs or importing consumer goods from Iran or Pakistan has undoubtedly assisted some individuals and even their communities to survive but it cannot be said to be at the present time a significant protection for the vast majority of the rural population.

Given the beleagured state of the rural economy what then are the main ways in which people have adapted or attempted to ensure a degree of future food security?

Perhaps the most significant development, other than individual efforts to purchase or store more food, is seen in the Mujahidin efforts to provide the communities within which they live and fight with greater security not only from attack but also in terms of foodstocks. There has, without doubt, been a major change in the last four years on the part of the resistance groups in Afghanistan from an initial reliance on the unqualified support of the people

for their stance to a realisation that the people could not support them indefinitely if they themselves were facing starvation. One of the innovations, in some areas has been to take on the responsibility of local government.

The vulnerability to manipulation by the regime is well recognised in the liberated areas and efforts to prevent the regime gaining control of food distribution and at the same time to prevent profiteering at local level have been made. Where the resistance is strong and unified (for example in the Panjshir) stringent rules governing which crops are grown, how much is put on the market, what prices are charged, when animals are to be sold and even whether or not families can leave the area have emerged. The penalties meted out to would-be black marketeers and collaborators, who attempt to buy up foodstocks to sell in the city centres, are harsh. Those resistance groups which forsee a long war have plans to maintain a permanent cadre of troops whose sole job will be to help in agriculture and food distribution tasks, such as maintaining or rebuilding irrigation channels where these need attention and controlling transport prices. It is too early to know how widespread and how successful this kind of organisation will be. The Mujahidin are aware from experience, for example, that control of market prices can immediately upset a delicately balanced market system as happened recently in Wardak Province when lowering of food prices prevented market traders from buying in further supplies thereby creating an artificial shortage of essential goods.

One of the effects of these initiatives has been to create two (though not entirely separate) economic systems: The regime and their Soviet advisors have consistently attempted to control actual produce, first of all by offering large salaries, wages and other financial inducements to employees and merchants thereby helping to maintain high prices in the cities and towns which in turn,

it was hoped would attract produce from surrounding rural areas. Secondly by encouraging a degree of centralisation of the food distribution system.

The Mujahidin leaders in liberated areas however, have tried to break this system by forbidding the transfer of food to occupied zones and by persuading the people to hold on to their real assets, that is agricultural produce, and not to participate in the inflationary money economy.

Whatever the immediate gains of these strategies and their possible longer term benefits - one effect must be to substantially decrease people's purchasing power of goods which either cannot be locally produced or imported through bypassing the regimes's controls. Whichever imports are controlled by the government will be increasingly unavailable to those communities in the rural areas who are not involved in the money economy and therefore not keeping pace with inflation. Where there is a physical barrier between surplus and deficit areas as for example between Northern Badakhshan (deficit area) and Taghor (surplus area) the former must eventually be forced to buy from Soviet controlled markets but equally will be unable to do so because of lack of money.

The only other option open to those people in marginal areas will be to move. The internal movement of people is at present a complex pattern but also a traditional Afghan reaction to catastrophic events such as war and/or famine (see Robinson 1978, Glatzer 1980). The movement of peoples to urban areas, a process encouraged by the regime so as to render the rural areas more safe for their activities but also to better control the urban population, is detrimental to the agricultural ecomony. It is also a typical pattern of behaviour of people whose food stocks are so low that they are forced to move to cities in search of food.

However, it is reported that Afghan villages are also following a reverse pattern and adopting a semi-nomadic way of life by intensifying the Dua Kora system for survival. The concensus of opinion in late 1983 was that those who were planning to move had already done so and that both the tightening up of relief benefits to refugees in Pakistan together with the costs involved in leaving Afghanistan would deter future major exodus. This could change if there was, for example, sustained bombing of a region sufficient to disrupt the planting season and therefore offering no hope of food for the peoples concerned. A further influx of Afghans into Pakistan, particularly of men from the remoter Provinces, seeking employment would be an indicator of impending famine.

There are two possible factors which could immediately cause widespread and potentially catastrophic food shortages in Afghanistan. Firstly, if the winter snows are insufficient which would reduce the irrigation flow during the growing season or if the rains fail in the dry-land areas. Secondly, if there were to be any attempt to close or even control the border between Afghanistan and Pakistan thereby interfering with trade. The present agricultural and food distribution networks in Afghanistan are far too fragile to withstand the impact of either of these events.

The social and administrative vacuum created by the war since 1978 has not been easy to fill and it is by no means clear that the embryo system of local Mujahidin government will develop sufficiently to become widespread and effective in building up food security systems. However, there is a further aspect to the rapid organi-

sation of the resistance groups and this is to do with the building up of an adequate framework to receive and distribute aid and development projects funded by various concerned humanitarian organisations in Europe and elsewhere. The major and understandable constraint so far to substantial investment in assistance projects on the part of these humanitarian agencies has been the lack of any suitable framework for the just and responsible distribution of aid. If it can now be shown that the Mujahidin, in certain areas, are prepared to and capable of fulfilling this local governmental role aid projects should then follow.

Given the results in this report, it is essential to set up a simple but regular monitoring scheme of agricultural production and food and transport prices in order to have advance knowledge of famine. Finally, the nutritional survey results in certain areas but especially in Badakhshan appear so serious as to warrant immediate investigation and assistance.

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The results of weight measurements are then compared to the 'reference' or well-nourished child of the same height. Since clearly even well-nourished children will show some variation, the range of what is considered 'normal' is quite wide.

The nutrition survey results are presented in three categories: normal; between 2 and 3 Standard Deviations below normal and greater than 3 Standard Deviations below normal which is widely accepted as representing severe malnutrition and indicates children which are likely to die.

Arm circumference measurement is based on the observation that well-nourished children have a nearly constant mid-arm circumference between the ages of 1-5 years. Under nourished children, however, have a thinner upper arm and therefore children can be classified as malnourished if their measurements fall below a specified level. (See De Ville de Goyet et at. 1978). Results are expressed as normal (Green); at risk (Yellow) and malnourished (Red).

C. Economic Survey. This survey, carried out in October and November of 1983 concentrated on prices and availability of food staples and other consumer goods, origins of food and other imports and the internal movement of people between rural and urban areas in six Provinces.

A total of 10 Provinces and 39 districts were covered by one or other survey. Unfortunately, due mainly to security factors, it was not always possible to ensure that the three different types of enquiry

APPENDIX 1

Survey data included the information listed below which was collected in the following way.

1. Anthropometric measurements of children greater than 50 cms and less than 110 cms roughly corresponding to between one and five years of age. All children in a given household were weighed and measured where possible and gross symptoms of disease recorded. Weight and height were measured with a Salter Spring Balance suspended on a tripod and a standardised wooden framework under which all children less than 110 cms could walk was used to eliminate older children. A specially constructed baby board was used to measure the length of those children who could not walk. Arm circumference was recorded with UNICEF measuring tapes.

2. Agricultural data was gathered using a questionnaire designed by Dr. Azam Gul and his associates and reproduced as an Appendix in the Report published in 1983 (see references). The chief parameters recorded were agricultural production of main crops together with information on the availability and price of wheat seed and fertilizer, state of irrigation systems and of land and crops cultivated, the kind and amount of crops bought and sold in 1981 and 1982. Results were expressed as a percentage of pre-1979 figures.

3. The economic survey was designed to gather information on the kind and amount of food and other commodities available on local markets. The prices of all staple foods and animals, fertilizer, salt and other commodities such as soap. The presence or absence of internal refugees in the villages sampled and the type of irrigation systems prevalent in the area. Finally the questionnaire recorded whether or not the villages and surrounding areas were under government or Mujahidin control.

While every effort was made to interview farmers and measure children is as widely dispersed villages as possible, often both military attacks and the suspicion of some village elders prevented this. For these reasons the report has emphasised that the results are perhaps more important for their relative rather than absolute values.

APPENDIX II

ANTHROPOMETRIC RESULTS ACCORDING TO PROVINCE AND DISTRICT *

A: KABUL

Districts	N		>-2 S.D.	>-3 S.D.	Green	Yellow	Red
Saroobi	121	95%	4%	0.8%	32.7%	43.3%	23.7%
Musahi	69	94.2%	5.8%	--	58.0%	26.9%	14.8%
Bagrami	1079	93.4%	5.7%	0.9%	41.9%	37.4%	20.9%

B: BALKH

Districts	N		>-2 S.D.	>-3 S.D.	Green	Yellow	Red
Narrishahi	794	87.8%	7.8%	4.3%	46.0%	30.6%	20.2%
Balkh	407	93.1%	3.4%	3.5%	45.7%	33.7%	19.1%
Shulgarah	344	91.3%	4.4%	4.3%	47.4%	31.5%	20.5%
Centre	179	80.4%	11.1%	8.3%	43.5%	40.2%	14.8%

C: BADAKSHAN

Districts	N		>-2 S.D.	>-3 S.D.	Green	Yellow	Red
Centre (Faizebad)	709	49.9%	18.9%	31.2%	32.6%	31.1%	35.5%
Keshem	472	78.1%	17.1%	4.6%	49.0%	36.0%	15.5%

D: FARYAB

Districts	N		>-2 S.D.	>-3 S.D.	Green	Yellow	Red
Sherin Tagab	178	89.3%	9.0%	2.7%	38.7%	39.1%	19.8
Pashtoon Kot	334	82.9%	12.0%	5.1%	53.8%	34.4%	9.9%
Centre	237	81.0%	12.7%	6.3%	50.1%	36.9%	6.6%

APPENDIX II (CONTINUED)

E: FARAH

Districts	N		>-2 S.D.	>-3 S.D.	Green	Yellow	Red
Bolobuluk	78	62.8%	19.2%	17.9%	10.0%	29.0%	61.9%

*Notes:

The results are expressed as percentages of the total number (N) of children weighed and measured in each category.

Weight-for-height data are given in 3 categories: X = within 'normal' range as defined by the NCHS/CDC (WHO) reference growth tables: greater than - 2 standard deviations below the mean: greater than - 3 standard deviations below the mean.

The arm circumference data are calibrated as follows: Green = normal or more than 13.5 cms: Yellow = Vulnerable or between 12.5 and 13.5 cms: Red = Malnourished or less than 12.5 cms.

The total sample of children between the ages of 1-5 years or less than 110 cms in height but greater than 50 cms was 5001.

APPENDIX III

PROVINCES AND DISTRICTS IN WHICH THE SURVEYS WERE CONDUCTED

1 : NUTRITIONAL SURVEY

PROVINCE	DISTRICTS
Kabul	Saroobi : Musahi : Bagrami.
Balkh	Narrishahi : Balkh : Shulgarag : Centre
Badakshan	Faizabad (Centre) : Keshem.
Faryab	Sherin Tagab : Pashtonkoot : Centre.
Farah	Bolobuluk.

2 : AGRICULTURAL SURVEY

PROVINCE	DISTRICTS
Kunduz	Markaz : Chardara : Iman Sahib : Khanabad.
Parwan	Panjshir : Bagram.
Baghlan	Baghlan : Sharikuna : Centre : Khoostfring : Anderab : Dushi : Nahrin : Pule Khumri.

APPENDIX III (cont)

3 : ECONOMIC SURVEY

PROVINCE	DISTRICTS
Nangahar	Centre: Serkhrud : Shinwar.
Kabul	Dehsabs : Charsiab : Bagrami : Pagman : Shakdareh : Chardeh : Mirbachakost : Qarabagh.
Parwan	Bagram : Jabulsaraj : Kuhistan.
Baghlan	Anderab : Centre : Nahrin : Sharifarid.
Samangan	Darisufi : Centre : Hazrafsultan : Ruiduab : Khulm.
Balkh	Centre : Narrishahi : Balkh.

APPENDIX IV

DEMOGRAPHIC DATA

Population	Urban	Rural	Total
Total settled population	2,134,000	11,525,000	13,659,000
Nomadic population			1,449,000
Grand total			15,108,000
Growth Rate	2.9	2.2	2.25
Birth Rate	37.7	43.9	43(41.3)*
Infant mortality rate	132.7/1000	193.2/1000	184.6/1000 (157)*
Average Family Size	6.60	6.17	6.23
Nomadic population			6.17

* MHS results (See Sources)

APPENDIX IV Continued

Comparative Demographic data

	Afghanistan	India	Iran	Pakistan	Iraq
Crude Birth rate	43	34	44	44	39
Crude Death rate	21	13	16	15	12
Annual Growth rate	2.2	2.1	2.8	2.9	2.7
Infant Mortality rate	182	122	139	121	119
Life expectancy	40	50	51	51	57

(1977)

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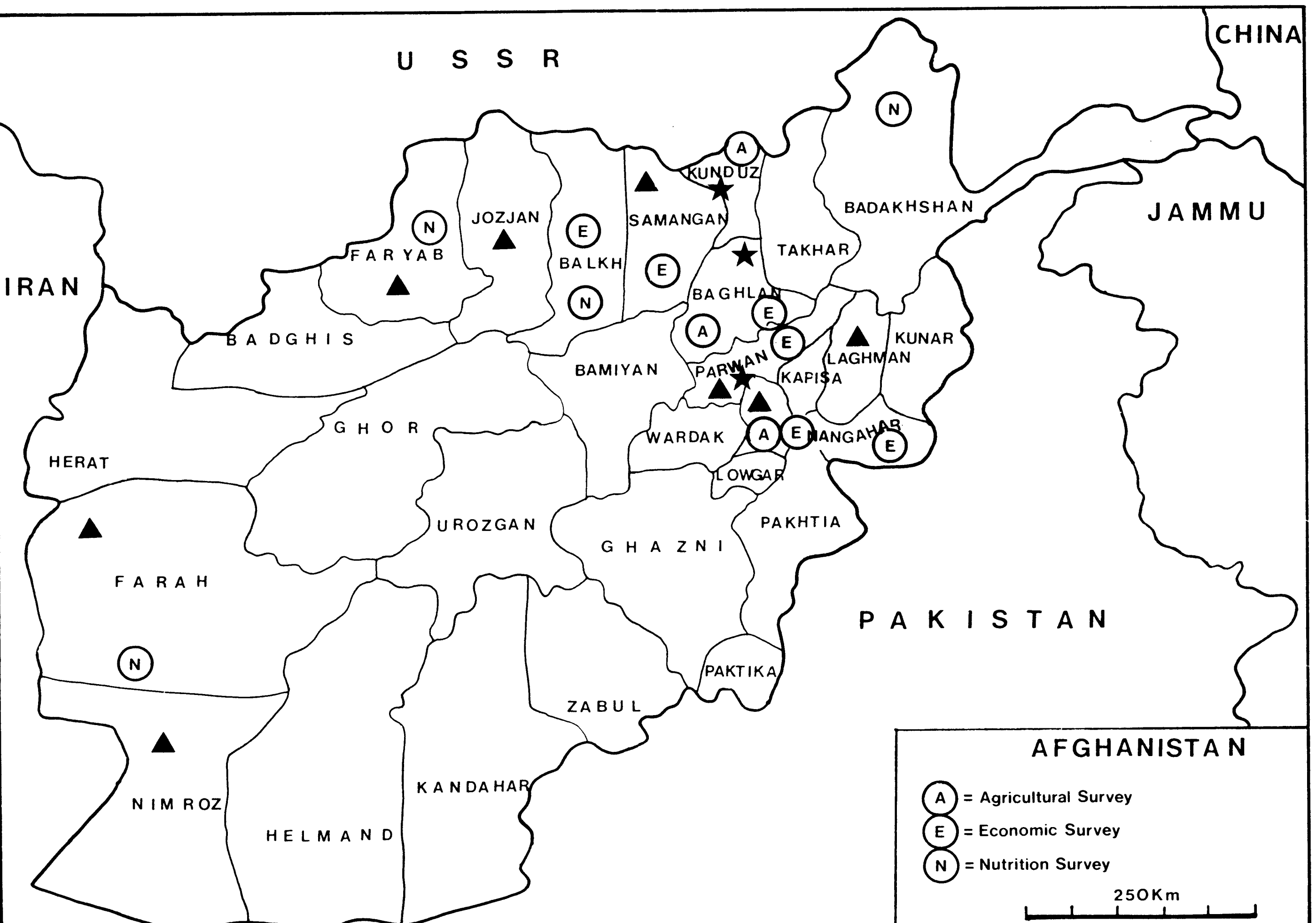


Fig 2. Provinces in which surveys were carried out

★ Provinces in which more than one survey occured

▲ Provinces in which farmers reported a severe reduction in agricultural production according to a survey carried out by Azam Gul (1983)

coincided geographically, nevertheless there is some overlap in four of the ten Provinces sampled. (see fig.2)

D. Limitations of the Survey Data. Although the surveys cannot be said to have conformed to statistical sampling criteria, due to the inherent difficulties of working in such a mountainous country as Afghanistan with consequent underdeveloped communications, difficulties greatly compounded by the war, the data are valuable for the following reasons:-

(i) Any reasonably systematically collected information on agricultural, economic or health aspects of the population today is rare and the results are probably as accurate as would be possible under present conditions.

(ii) The results can, if cautiously treated and taken in conjunction with other circumstancial evidence, provide information on <u>differences between</u> provinces.

(iii) The data collected can provide a baseline for future surveys in certain areas. For example a future survey of an area threatened with acute food shortages could now be carried out more accurately and more rapidly.

(II) <u>Interview Data</u> The survey results together with detailed information from recently returned journalists and mujahidin in Pakistan helped to fill in the picture already gained from a series of preliminary discussions with those permanently based "Afghanistan Watchers" in Peshawar. Particularly they enabled measurement of differential hardship and food shortage accroding to geographical area. Subsequent, more focussed, interviews with newly arrived

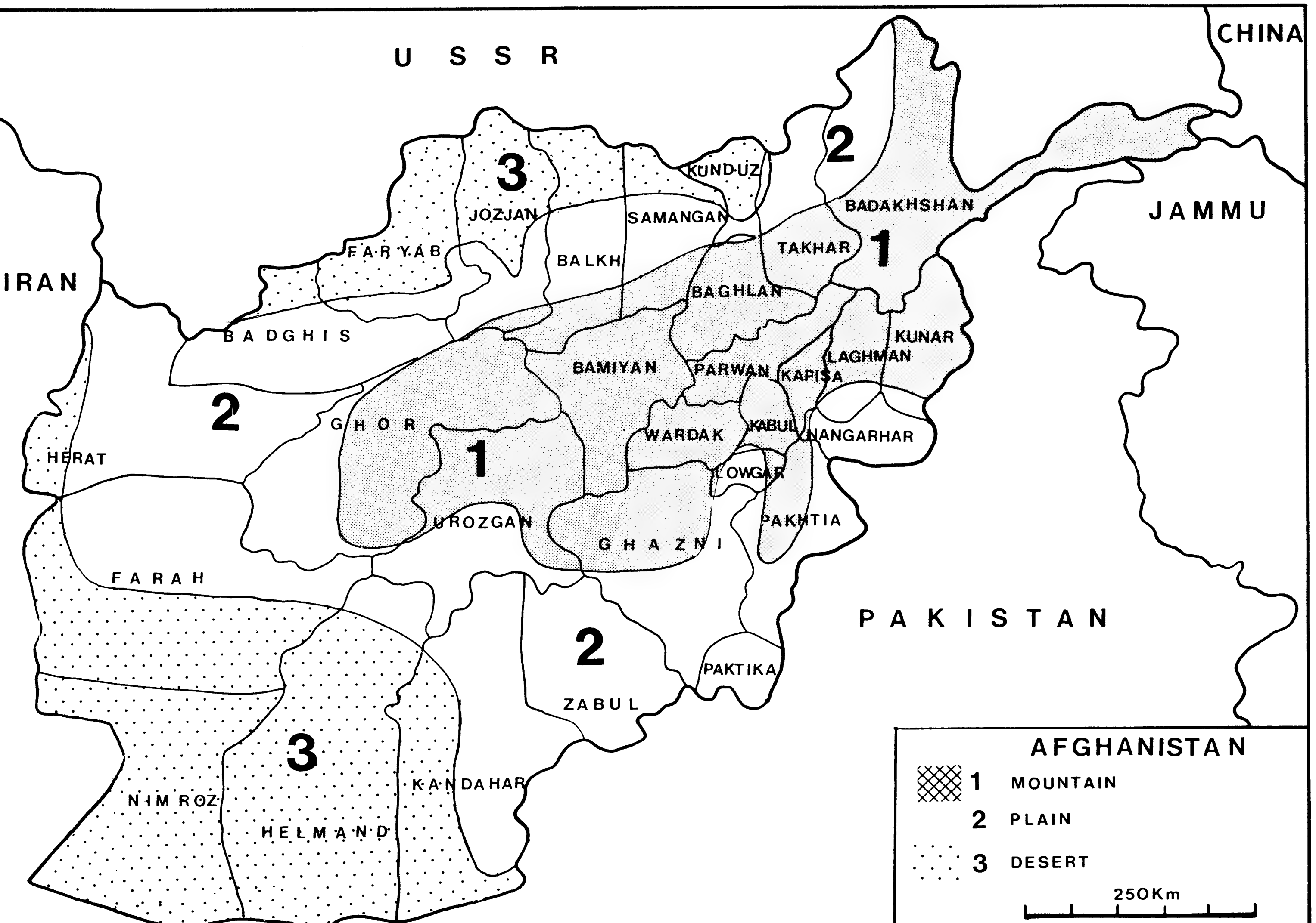


Fig 1. Map of Afghanistan showing mountains, deserts and plains

refugees and returning medical teams as well as with mujahidin from vulnerable provinces were used to validate these numerical data. The interviews focussed on food prices and availability in local bazaars, disease patterns, bombing attacks, amount of land under cultivation, and damage to irrigation systems.

(III) <u>Information from Published and Unpublished Documents</u> The relevant literature falls into two categories; first that which provides information on the pre-war economy and health of the population; second the largely unpublished literature which documents the Afghan conflict since 1978. There exists in Pakistan a large number of unpublished reports and papers which are highly relevant to the subject of this report. This literature is widely dispersed and its usefulness depends on its collation. . Every effort was made to do this. Of particular value were those reports produced for internal consumption by the various Afghan parties in Pakistan which often give unembellished accounts of the state of the fighting as well as of the economic responses adopted by the Mujahidin to enable rural communities to survive.

In the discussion section more detailed attention is given to the four provinces of Balkh, Baghlan, Badakhshan and Parwan as illustrating four different kinds of opportunity and constraint.

3. THE BACKGROUND

(I) The Environment

Afghanistan is not only described as one of the least developed countries in the world but also one of the most elusive in terms of hard facts. Dupree (1980) described most Afghan statistics as "intelligent estimates otherwise known as wild guesses based on inadequate data". As one example of this there is no agreement on the population figures for Afghanistan and the estimates vary between approximately 10 and 17 million peoples. Estimates of the nomadic population range from under 1 million to 2.5 million people. (See Appendix IV) Nevertheless some generalities can be made. Afghanistan consists of some 650,000 square kilometres of what is often bare and eroded land which can be divided into ten geographical zones each partly dominated by a mountain range and a river system (see fig.1). The high and mountainous character of the country has been and still is a major obstacle to development not least since the costs of improving communications are very high.

The tendency in Afghanistan towards isolation is partly the result of the nature of the terrain but is undoubtedly also reinforced by ethnic rivalries and the long history of suspicion between one minority and another. Added to this there is also a tradition of family and village feuds especially in the Eastern Provinces all of which contributes to a less than central society and indeed one which fiercely resists any attempt at central control.

(II) The Economy

In spite of strenuous efforts, made in the past 25 years or so, by aid donors to support industry, Afghanistan remains a country of small farmers. In some regions at

least they may produce a regular and substantial surplus for sale in local markets or even for export but in times of stress all revert to a largely subsistence economy.

There has been growth of some industries mainly in and around Kabul city and in the Northern Provinces of Baghlan and to come extent Kunduz and Balkh. But these are still modest and Afghanistan remains predominantly an agricultural economy with a rural population. Conservative estimates suggest that perhaps 85% of the population live in rural villages and that, in 1976 at least, less than four cities had more than 100,000 inhabitants. Even many of those individuals who earn the majority of their income from employment in the larger cities will still own agricultural land which is farmed by tenants, relatives or neighbours.

The climate in Afghanistan is not always conducive to productive agriculture; the summers are hot and dry and the winters extremely harsh with snow blocking the mountain passes between the valleys for anything up to five months of the year. However the plentiful snow together with the rain which falls from December to February are vital to the agricultural economy. The limitation on Afghanistan's agricultural production is not so much the scarcity of cultivable land but the means with which to irrigate it.

There are five main systems of watering crops, which are listed in order of reliability and preference; first the karez an underground system of water channels which arise from the mountains and extend for anything up to 40 kilometres; second the river system whereby side channels are cultivated along the main river course to be fed into adjacent fields; then there are irrigation channels where water is often trained for many kilometres from high mountain springs and streams to fields in the valleys

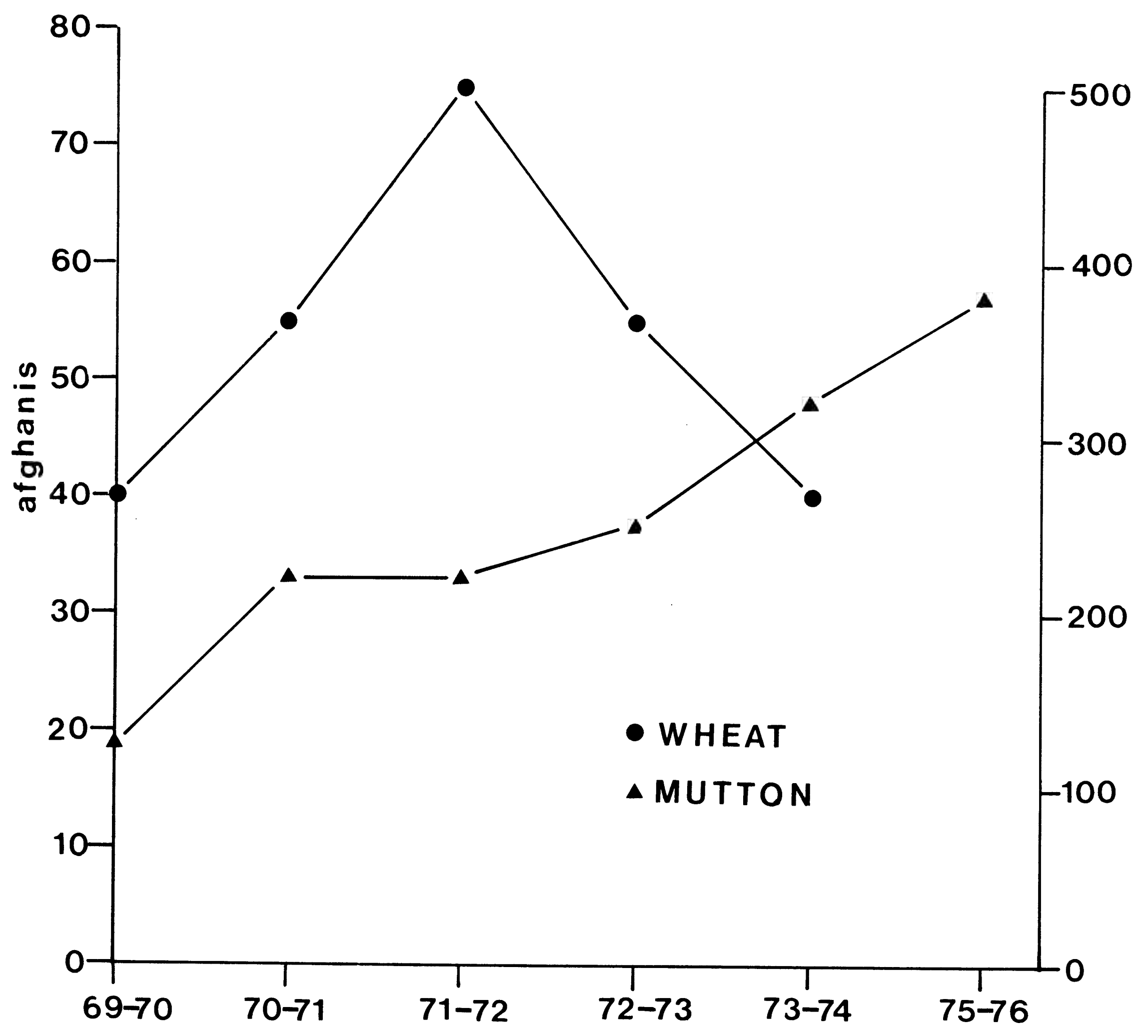


Fig 3. Graph illustrating the contrary movements of wheat and mutton prices before, during and after the famine in 1971 and 1972 (Source: Barfield 1981)

below; wells and finally rainfall.

Land is divided into irrigated Abi and dry land Lalmi. Farmers cultivate wheat, corn, barley, rice, oilseed, vegetables, fruit and nuts. Cash crops include cotton, sugarbeet as well as animal products e.g. karakul sheep. At very high altitudes, for example in Northern Badakhshan, there may be insufficient land to grow enough wheat to last the community through the year and in these cases animals, nuts or, even at times, women are traded south in order to buy grain. Rice is restricted to northern and well irrigated lands and is considered a luxury in more southerly provinces particularly in the central regions of Afghanistan, where it can reach very high prices.

As well as crop production animals play a crucial role in the economy as "capital on the hoof" for sale when grain stocks are low at the end of the winter, usually in March and April, as food and as part of the required gifts to relatives and to in-laws. Because of the importance of animals and the sharply divided seasons in Afghanistan most Afghan people adopt what the Pashto speakers call the Dua Kora or two house system whereby part of the family will, during the summer months, repair to very high mountain pastures to graze their animals and return to their valleys when snow forces them down.

Apart from major subsistence crops such as wheat, vegetables and fruit all farmers will grow specific animal fodder crops to sustain them during the winter. North of the Hindu Kush, where the land is relatively flat and irrigation systems are well developed, cotton is grown as a major cash crop. Other cash crops cultivated mainly in the Northern provinces include sugar cane, oil seed, vegetables and sugar beet. In the East, Southern and Central regions

SUMMARY OF FINDINGS

1. This Report examines the availability and distribution of food and nutritional status of children in Afghanistan and considers the possibility of famine. Data were collected from a wide variety of sources including the results of surveys and interviews in Pakistan and Afghanistan between September and December 1983.

2. Preliminary investigations indicated that certain regions of Afghanistan might be more vulnerable to severe food shortages due to a combination of remote geographical location and consequent poor communications, a tradition of poverty and recent military intervention.

3. Those areas which prior to 1978 had been vulnerable to food shortage and famine would more likely be suffering under present conditions. Conversely those areas which had reasonably established economic and trading links with a wider community would be better able to withstand the severe disruptions of war.

4. The results show a general trend of reduced agricultural production, a rise in prices of food staples and an increase in transport costs which has severely curtailed the food distribution and trading networks.

5. Of the 10 provinces and 39 districts sampled, the most severely affected, as judged by either nutritional status of children, agricultural or economic evidence or a combination of the three, are Badakhshan and Parwan. Of the remaining provinces, Faryab and Nangahar show poor nutritional status and high prices respectively.

6. Both Badakshan and Parwan are of primary strategic importance and have therefore been subjected to repeated attacks from the regime's forces during the past four years. Badakhshan is and always was vulnerable to food shortages due to its remoteness and lack of flat and cultivable land. Trade patterns have been disrupted by the war and the nutritional survey results indicate a high prevalence of severe malnutrition. Parwan, a previously fertile area traditionally relying on export of fruits and other agricultural produce is also a strong centre of resistance and has suffered sustained bombing attacks with consequent widespread damage to the agricultural system and trade.

7. Less data is available from the Southern, Western, North-western and Central regions of Afghanistan. Although there are undoubtedly local food shortages the regions in general do not appear to be suffering acute food shortages at the present time. However, there is reason to suppose that some regions in the central provinces of Afghanistan could quickly become vulnerable to famine. This is because they are mountainous and remote from markets and tend to rely on non-irrigated farming systems which in turn makes them vulnerable to any change in the rainfall pattern.

8. The Northern provinces although near to the Soviet border and subject to attacks are, on the whole, agriculturally rich and appear to have sufficient food and sufficiently low prices to enable local people to buy what food is available. Baghlan province which is considered to be the richest in all of Afghanistan, shows the greatest amount of surpluses and lowest price rises in the past four years.

9. The Eastern provinces although heavily bombed have access to food and trading links with Pakistan

10. The urban areas of the larger provinces have in many cases received an influx of many hundreds of thousands of internal refugees or displaced person during the past four years. This has put a severe strain on services such as housing, health, education, sanitation and there are shortages of fuel, clothing and other consumer goods. However, the prices of food staples remain relatively low and it is unlikely that severe food shortages exist. That said, there is evidence from the nutritional survey to suggest that the poorer communities who rely on buying food in the urban centres, are suffering an unacceptable degree of malnutrition. A high prevalence of malnutrition is however common in some parts of Afghanistan and does necessarily indicate famine conditions.

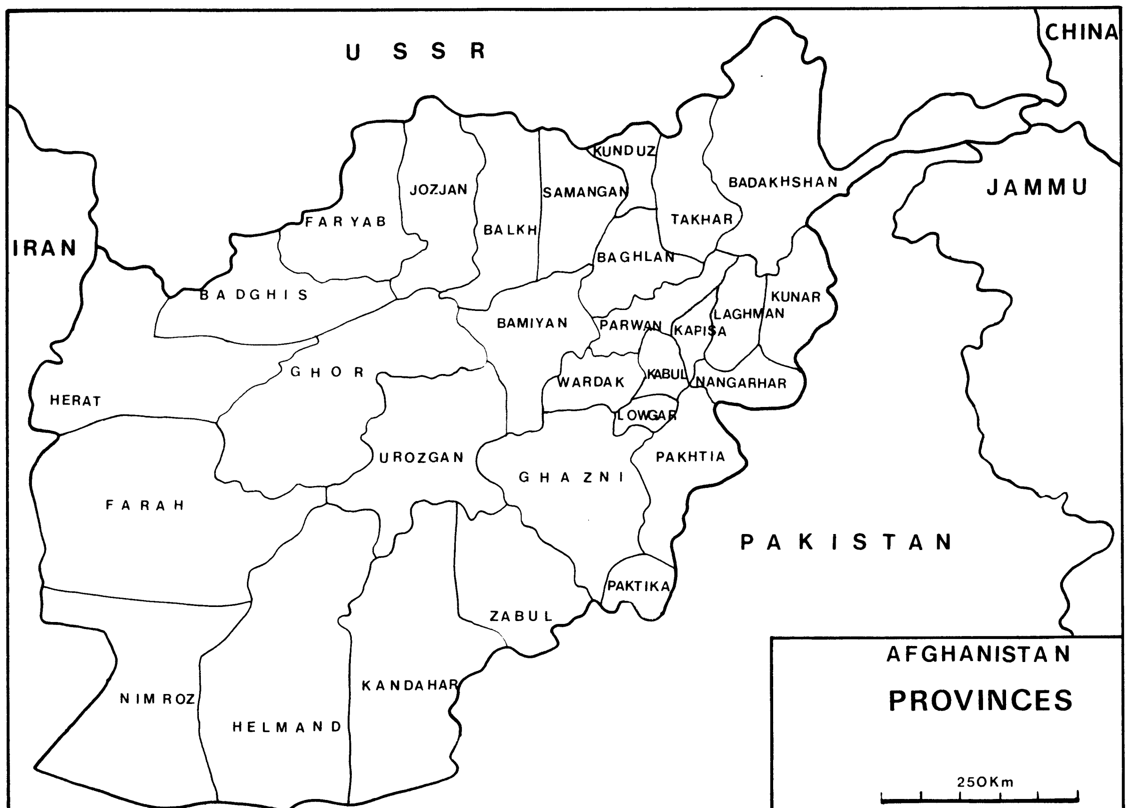
11. Response to the needs created by the war by organisations at the local level involving either or for the commanders of the Mujahidin groups and village councils is concerned with ensuring that essential food crops are cultivated and that prices are to some extent controlled. In certain regions the Mujahidin are preventing people from abandoning farms or selling crops on the open market. This is to forestall the regime buying up grain stocks in the immediate pre-harvest phase when prices are low and reselling them at the end of the winter when prices rise sharply.

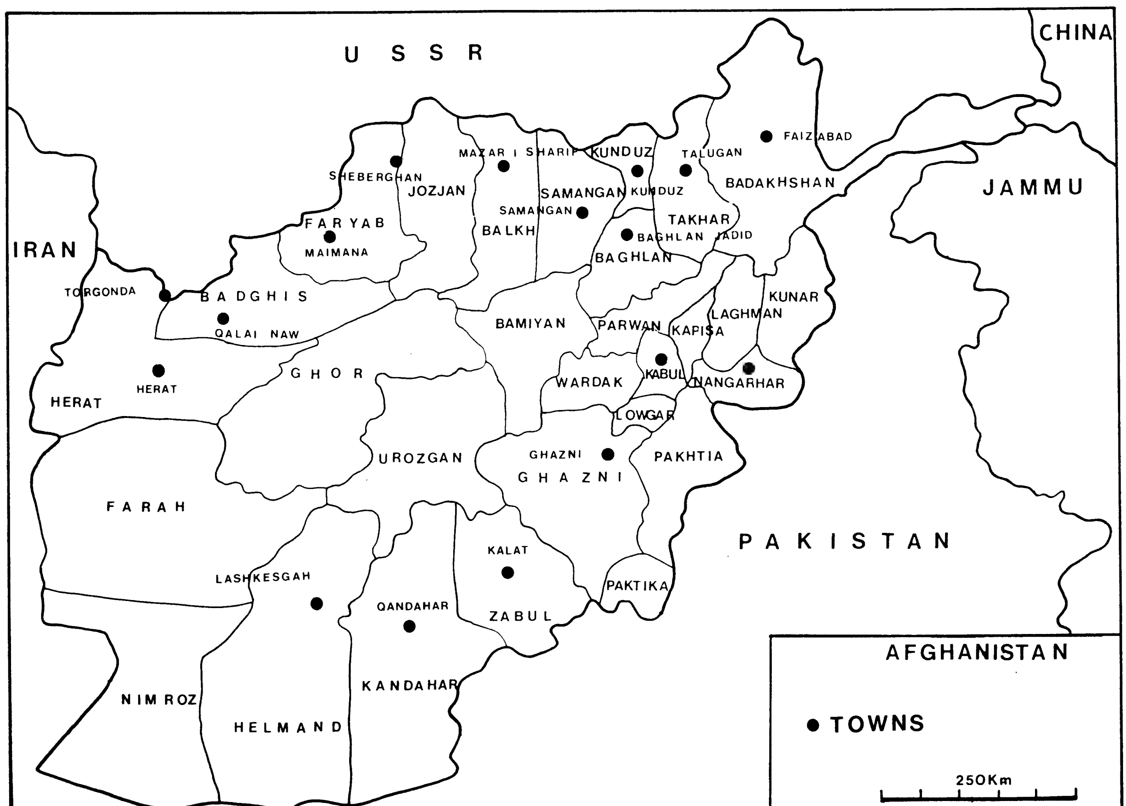
12. The rural economy of Afghanistan appears to be reverting in some areas to a subsistence one.

13. Further collection of data particularly of price changes and anthropometric surveys in those areas which could now be considered to be highly vulnerable will enable conditions to be closely monitored for the future.

14. Increased internal movements of people to urban centres, or to Pakistan as refugees and sharp rises in food prices are classic pre-famine indications and give warning of serious food shortages.

15. It is suggested that any relief or development assistance destined for relieving the plight of peoples inside Afghanistan should be carried out in collaboration with the more organised and unified Mujahidin groups which would ensure a degree of both accountability and continuity.


U S S R
CHINA
JAMMU
IRAN
PAKISTAN
KUNDUZ
JOZJAN
SAMANGAN
BADAKHSHAN
FARYAB
BALKH
TAKHAR
BAGHLAN
BADGHIS
KUNAR
LAGHMAN
BAMIYAN
PARWAN
KAPISA
GHOR
WARDAK
KABUL
NANGARHAR
HERAT
LOWGAR
UROZGAN
PAKHTIA
GHAZNI
FARAH
PAKTIKA
ZABUL
KANDAHAR
NIMROZ
HELMAND
AFGHANISTAN
PROVINCES
250Km


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IRAN
PAKISTAN
FAIZABAD
MAZAR I SHARIF
KUNDUZ
TALUGAN
SHEBERGHAN
JOZJAN
SAMANGAN
KUNDUZ
BADAKHSHAN
SAMANGAN
TAKHAR
FARYAB
BALKH
BAGHLAN JADID
MAIMANA
BAGHLAN
TORGONDA
BADGHIS
KUNAR
QALAI NAW
LAGHMAN
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PARWAN
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LASHKESGAH
PAKTIKA
QANDAHAR
ZABUL
KANDAHAR
NIMROZ
HELMAND
AFGHANISTAN
TOWNS
250Km

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THE THREAT OF FAMINE

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A Report on Current Economic
and Nutritional Conditions

by

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APPENDICES

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